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GAZETTEER

OF THE

JHANG DISTRICT,

1883-84.

Compiled and Published under the authority of the Punjab Government.

Lahore:

PRINTED AT THE "ARYA PRESS," BY RAM DAS.

1884.

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PREFACE.

THE period fixed by the Punjab Government for the compilation of the *Gazetteer* of the Province being limited to twelve months, the Editor has not been able to prepare any original matter for the present work; and his duties have been confined to throwing the already existing material into shape, supplementing it as far as possible by contributions obtained from district officers, passing the draft through the press, circulating it for revision, altering it in accordance with the corrections and suggestions of revising officers, and printing and issuing the final edition.

The material available in print for the *Gazetteer* of this district consisted of the Settlement Reports, and a draft *Gazetteer* compiled between 1870 and 1874 by Mr. F. Cunningham, Barrister-at-Law. Notes on certain points have been supplied by district officers; while the report on the Census of 1881 has been utilised. Of the present volume, Section A of Cap. V (General Administration), and the whole of Cap. VI (Towns), have been for the most part supplied by the Deputy Commissioner; Section A of Cap. III (Statistics of Population) has been taken from the Census Report; while here and there, and especially in the matter of ancient history, passages have been extracted from Mr. Cunningham's compilation already referred to. But with these exceptions, the great mass of the text has been taken almost if not quite verbally, from Mr. Steedman's Settlement Report of the district.

The draft edition of this *Gazetteer* has been revised by Colonel Harcourt, Major Bartholomew, and Mr. Steedman. The Deputy Commissioner is responsible for the spelling of vernacular names, which has been fixed throughout by him in accordance with the prescribed system of transliteration. The final edition, though completely compiled by the Editor, has been passed through the press by Mr. Stack.

THE EDITOR.

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Table No. I, showing LEADING STATISTICS.

1	2	3	4	5
DETAILS.	DISTRICT.	DETAIL OF TAHSILS.		
		Jhang.	Chiniot.	Shorkot.
Total square miles (1881)	6,007 ‡	2,365	2,272	1,220
Cultivated square miles (1878)	643	263	194	186
Culturable square miles (1878)	3,939	1,569	1,493	877
Irrigated square miles (1878)	319	139	101	79
Average square miles under crops (1877 to 1881)	474	204	132	138
Annual rainfall in inches (1866 to 1882)	10·2	10·2	13·0	9·6
Number of inhabited towns and villages (1881)	761	333	254	174
Total population (1881)	395,296	171,713	128,241	95,342
Rural population (1881)	358,315	150,084	117,510	90,721
Urban population (1881)	36,981	21,629	10,731	4,621
Total population per square mile (1881)	69	73	60	79
Rural population per square mile (1881)	63	64	55	75
Hindus (1881)...	64,892	32,168	15,369	17,355
Sikhs (1881)	3,477	2,417	693	367
Jains (1881)	4	...	4	...
Musalmans (1881)	326,910	137,121	112,173	77,616
Average annual Land Revenue (1877 to 1881)*	4,08,420	1,73,714	1,22,481	1,12,225
Average annual gross revenue (1877 to 1881) †	4,91,299	...	...	...

*Fixed, fluctuating, and miscellaneous. † Land, Tribute, Local rates, Excise, and Stamps. ‡ Including 150 square miles [illegible]er bed.

CHAPTER I.

THE DISTRICT.

SECTION A.—DESCRIPTIVE.

Chapter I, A.

Descriptive.

General description.

The Jhang district is the northernmost of the four districts of the Mooltan division, and lies between north latitude 30° 35′ and 32° 4′, and east longitude 71° 39′ and 73° 38′. It is in shape triangular, with its apex to the south-west and its base to the north-east. The acute angle of the apex is contained between the districts of Muzaffargarh and Dera Ismáil Khán, and the base line marches with Sháhpur and Gujránwála. The south-eastern side is bounded for the greater part of its length by the Montgomery district. The remaining portion adjoins Mooltan and Muzaffargarh. The north-western side, which is more irregular in direction than the south-eastern, is bounded by the Dera Ismáil Khán and Sháhpur districts. The length of a line drawn from the bi-section point of the base to the apex where the three districts meet, is about 124 miles; while another drawn at right angles to the above, through Kot Isa Sháh, Khíwa and Samundri, is a little under 70 miles in length. From the apex to the north-east and north-west base angles, the distances are respectively 152 and 124 miles. The area of the district is given in the margin.

Tahsíl.	Area in	
	Acres.	Square miles.
Chiniot	1,453,822	2,271·60
Jhang	1,513,842	2,365·37
Shorkot	781,017	1,220·34
River Chenáb, 76,005 ,, Jhelam, 17,582 ,, Rávi ... 2,489 ...	96,076	150·12
Total ...	3,844,757	6,007·43

The district is divided into three tahsíls by two lines running right across the district parallel to the base. The north-eastern portion so cut off constitutes the tahsíl of Chiniot, the small triangle lying to the south-west that of Shorkot, and the central portion of the district that of Jhang. The uplands of the district are for the most part Government waste, and not included in any village boundary; indeed only some 40 per cent. of the total area is so included. The remaining 60 per cent. is inhabited only by wild pastoral tribes whose flocks graze at large over the wide-spread plains, while their habitations are mere temporary hamlets of thatched huts, to-day occupied and to-morrow deserted.

Chapter I, A.

Descriptive.

General description.

Some leading statistics regarding the district and the several tahsíls into which it is divided are given in Table No. I as a frontispiece. The district contains two towns of more than 10,000 souls, *viz.* :—

Maghiána	...	..	... 12,574
Chiniot	...	...	.. 10,731

The administrative head-quarters are situated at Maghiána, distant only some three miles from the town of Jhang, from which the district takes its name.

Jhang stands fourth in order of area, and twenty-sixth in order of population, among the 32 districts of the Province, comprising 5·35 per cent. of the total area, 2·10 per cent. of the total population, and 1·52 per cent. of the urban population, of British territory. The latitude, longitude, and height in feet above the sea of the principal places in the district are shown in the margin.

Town.	N. Latitude.	E. Longitude.	Feet above sea-level.
Jhang (Maghiána)	31° 16′	72° 22′	570*
Chiniot ...	31° 44′	73° 1′	831
Shorkot •	30° 50′	72° 7′	560*

Physical formation.

The district is traversed by two rivers, the Chenáb and the Jhelam. The Chenáb enters the district a little west of the bi-section point of the base line, and after receiving the waters of the Jhelam, leaves the district about 12 miles east of the district apex. The course of the Chenáb is steadily to the south-west, and the river consequently divides the district into two very nearly equal portions. The Jhelam enters the district at a point about 56 miles distant, and very nearly due west from where the Chenáb first touches the Jhang border. This river flows in a course nearly due south, and is absorbed into the Chenáb 40 miles below where it leaves the Sháhpur district. The tract between the two rivers is a lesser triangle within the greater of the district boundary. Physically the formation of the district is that of an old alluvial flat, the remains of which are found in the high plateaux of the Sándal Bár, the Kirána Bár, and the Thal, traversed by the river valleys of the Chenáb and the Jhelam. The Sándal Bár is situate to the east of the Chenáb, the Kirána Bár between the Chenáb and the Jhelam, and the Thal west of the Jhelam. Between the Bár and the Thal uplands, and the lowlands or Hithár annually flooded by the rivers, there is an intermediate tract called the Utár, and there can be little doubt but that all three represent different ages of geological formation. The Bárs and Thal are the oldest formations, and even they are of distinctly alluvial origin. These tracts are probably identical, and geologically synchronous with the great plain of the Punjab made up of the various Doábs, each consisting of an elevated tract sloping down to the river valleys on either side.

The Sándal Bár.

In the northern portion of the district, the Sándal Bár rises abruptly from the Utár, and the summit of the dividing ledge is

*Approximate.

Chapter I, A.

Descriptive.

The Sándal Bár.

from 10 to 30 feet above the plain below. From the Gujránwála border to the village of Pabbarwála, the ledge (Nakka, Dhaya, Dáh) runs near and parallel to the river, and forms the boundary between the lands included in villages and the Government waste. South of Pabbarwála the ledge runs at some distance from the river into the Government waste, and does not any longer form a *quasi* boundary between private property and that of the State. As one travels south, the bank imperceptibly disappears, until at length it is impossible to say where the Bár ends or where begins. There is, however, a gradual rise in the country from the river to the Bár, evidenced by the increasing depth to water as the river recedes, and also by the direction of the surface drainage. The whole of the vast extent of country included within this Bár is, with a few trifling exceptions, the property of Government. The private rights that are now enjoyed by the sinkers of wells on leases from Government will be separately noticed. There are no village estates in this tract. The only cultivation that exists is attached to wells that are held under lease from Government; or, in a year of good rainfall, patches of rain cultivation will be found scattered sparsely here and there. In point of soil the northern portion of the Bár is generally good. There is a marked and obvious deterioration to the south. The most general distinction between good and bad land is that between sweet and sour. No grass grows kindly on *kallar*, and practically the quality of the Bár soil depends solely upon its power of producing pasturage. Among the sweet soils it is noticeable that a good loam with a slight sprinkling of sand on the top, as is often seen in the Bár, makes the best grass land. The reason is at once apparent. When the first summer rains fall, the ground has been parched and burnt by the heats of May and June into the consistency of iron. Last year's grass has been grazed down to the roots, and the surface is almost perfectly bare. Besides the natural power of absorption possessed by the soil, there is nothing to prevent the rain as it falls from draining away into the nearest depression. Where the soil is sandy and friable, the rain sinks where it falls; but on clayey lands it does not penetrate far into the soil, and is either carried away by surface drainage or evaporated by a burning sun. Not only is the soil poorer and *kallar* plains more frequent in the southern portion of the Bár, but even the better class of grasses, such as Dháman, are hardly ever found. Chhembar is about the only good grass that can be got to grow on *kallar*. The other natural productions of the Bár are the *pílú*, the *jand*, the *phog*, and the *karíl*, with here and there a few *farráshes* growing where surface drainage collects, and various salsolaceous plants. The *khár lání*, from which *sajjí* is made, is rarely found north of the road from Jhang to Ghapni. There are a few small hills near and between Sángla and Sháhkot in the north of the Bár.

The Kirána Bár.

The Kirána Bár, a portion of the Chaj Doáb, takes its name from the Kirána hills found here. These hills are not, as generally supposed, and as stated by Mr. Monckton, outliers of the Salt Range. The following description is taken from Medlicott and Blanford's Manual of Geology:—"Far to the north-west of the

Chapter I, A.

Descriptive.

The Kirána Bár

"Hisár country some hills occur on both sides of the Chenáb at "Chiniot and Kirána. These hills are only 40 miles distant from "the Salt Range, but the rocks are totally different from any that "occur there, and correspond well with the character of the transi-"tion rocks of the Arvali series. They consist of strong quartzite "with associated clay slates, forming steep ridges, with a north-east "to south-west strike. The highest summit is stated by Doctor "Fleming to be 957 feet above the plain. The oldest rocks "of the Salt Range are probably very much younger than the "strata of Kirána." The rocks at Shahkot and Sángla belong to the same formation as the Kirána hills. Just above Chiniot the Chenáb runs most picturesquely through a couple of gorges in these hills.

The lands of the Kirána Bár to the south and east of the hills are of superb quality. After slight showers of rain, the whole country is carpeted with grass. Better rain crops are grown here than in the Sándal Bár. To the west of Kirána and westwards, until the villages near the Jhelam are reached, the Bár soil deteriorates, and more and more *kallar* is found. The Kirána Bár is demarcated from the Utár by the same fall or slope as the Sándal Bár. Generally this ledge forms the boundary between the villages and the Government waste. But few villages possess lands beyond the high bank, or Nakká, as it is called. The flora of this Bár is much the same as that of the Sándal. *Sajjí* is produced to the south-west of Kirána. Some peculiar grasses grow on and near the hills, that are held to be of most excellent quality.

The Thal.

The strip of Thal attached to this district is of inconsiderable area, 246,554 acres. To the north the strip is exceedingly narrow, but it widens out considerably to the south of the Jhang and Dera Ismáil Khán road. The Thal apparently is a high plateau similar to the Bárs, with this difference, that it is more or less completely covered with hills and dunes of blown sand. The soil below the sand is good enough, but it only crops out here and there. Where the Jhelam enters the district it runs alongside, and is cutting away the high bank of the Thal. Thence, due west as far as the Indus Kachhi, there is nothing but the most sterile waste of monotonously parallel sand dunes. In the Thal attached to the Jhang district there is little or no cultivation. The distance to water is so great as to render well farming much less profitable than in the portions of the Thal nearer to the Indus. The aspect of this tract is dreary in the extreme. Rolling sand hills, running in an almost uniform direction, alternating with hollows of fairly good soil studded with *pílú* bushes, are the only features of a landscape unsurpassed for its monotony. The one prevailing tint of the soil is a light reddish-brown, which after rain becomes rufous. The only greenery is that of the *pílú* bushes and trees. There is no *lánd* or *lání*. Here and there *phog* and *karíl* bushes are seen, but the distinctive feature of the Jhang Thal is the *pílú*. The effect of the Thal is one of unrelieved depression. The Bár has a directly contrary influence. Grass grows luxuriantly in the Thal after heavy rain, but it is seldom seen in this happy state.

Chapter I, A.

Descriptive.

The tracts between the Bírs and Thal and the rivers.

The tract intermediate between the uplands of the Bár and Thal and the lowlands (Hithár) of the river valleys presents considerable variety. This tract is the more interesting, in that it contains the villages that pay the land revenue of the district. The characteristics of the tracts intermediate between the Sándal Bár and the Chenáb, the Kirána Bár and the Chenáb, the Kirána Bár and the Jhelam, and the Thal and the Jhelam and Jhelam-Chenáb, are sufficiently strongly marked to render separate descriptions necessary.

Between the Sándal Bár and the Chenáb Hithár lands.

The tract between the Chenáb and the Sándal Bár extends from the borders of Gujránwála to the villages on the Rávi. It varies in width from four to sixteen miles, but the average distance from the river to the Government Bár is usually eight miles. Signs of its fluvial formation are to be seen everywhere. As in the Bár, so in this tract, the gradual deterioration as one goes south is distinct and obvious. From Gujránwála to the boundary of the Jhang tahsíl, the difference is not so clearly marked; but thence southwards, the inferior quality of the soil, the infrequency of good grass-land, the constant occurrence of *kallar* flats, at once strike the observer. Mr. Monckton writes:—"The Jhang district may "be described in general terms as a region destitute of living brooks "and shady groves, and with the exception of the rivers Jhelam and "Chenáb, and the fringes of cultivation on their banks, the country "is a dry waterless tract, covered with a sparse *jangal* of bushy "trees. The march from Khíwa to within a mile of Jhang stands "probably unrivalled in the world for its combination of the most "disagreeable features a landscape is capable of affording." The best way to describe this tract and its varying character is to take three sections from the river to the Bár, one for each tahsíl. The starting point will be the bank of the Utár, beyond which the river floods have been never known to pass. In Chiniot, with an unimportant break here and there, this bank is bordered by a fringe of well cultivation that constitutes the prettiest and most fertile portion of the tahsíl. Each well is bowered in a cluster of trees, generally *kíkars* and *shíshams*. Near the bank the cultivation is almost continuous, and there is hardly any patch of waste. Passing onwards the wells open out, and the intervening patches of waste become more frequent. These wells too are good in quality, and some discretion has been exercised in selecting their sites. Beyond these wells comes a stretch of waste land, where the cattle of the village graze while at home. The soil varies. Depressions with a clayey bottom, uplands of light loam, sandy tracts, with here and there a sand-hill, and patches of *kallar*, continually alternate. Then come the wells of the villages beyond the riverain estates, and beyond them again are the villages lying under the Bár. The wells are scattered, and each is a small hamlet in itself. The only wells whose cultivated lands adjoin are, as a rule, round the village, if there is a village. The waste between the wells is of good quality, and produces, with the assistance of wonderfully little rain, first-rate crops of grass. Next come the villages under the Bár. Here the distance to water is great, and without rain, or the assistance of surface drainage, they do but poorly. Consequently the

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Between the Sándal Bár and the Chenáb Hithár lands.

wells are found in lines parallel with the bank of the Bár, and the zamíndárs use every contrivance to conduct on to these lands the silt-charged water that rushes down from the Bár uplands after rain. The aspect of this country and its wells is, as may be easily supposed, subject to the greatest changes. In seasons of good rainfall, no wells or tracts look so bright and smiling. In seasons of drought, a more desolate country and wells more poverty-stricken in appearance cannot well be imagined. The areas of the wells are lying untilled, parched, and hardened by a relentless sun. The surrounding waste lands afford not one blade of grass. Everything presents a dull brown scorched appearance. In Jhang the fringe of well cultivation along the flood bank betrays by its many breaks and its irregularity in breadth, that the soil is not what it is in Chiniot. Nor are the wells in themselves so prosperous in look as those lying farther north. The farming is responsible for this. There is not any very great difference in the soil where the wells are placed. Where there are no wells, the Utár plain above the river lands generally consists of a *kallar* flat, its uniformity broken here and there by small mounds that have collected and are now forming round the stunted *karír* or *jand* bushes. There is also a thick growth of *lánú* or *lání*, or of both intermixed. The wells beyond are more scattered, as good land is scarce. No use is made of surface drainage. The wells and country are uninviting. There are few trees round the wells. There is but little grass in the waste. *Lánú* is the only plant that really seems to enjoy the soil and climate. *Khár* is found in the south of the tahsíl. It seems to be a plant somewhat capricious in its choice of locality. The upper part of Shorkot is very similar to the lower portion of Jhang. *Kallar*, *lánú*, *lání*, and *khár* are more diffused, and good grass land is less common. Traces of river action are here more numerous. Depressions and tracts covered with sand dunes are met with more frequently. Trees there are none, except here and there, near some depression in which water collects during the rains. To the south the Chenáb widens out, and the Utár tract becomes very narrow, and the soil in parts reaches a climax of sourness. Between the Utár land and the tract that is ordinarily flooded by the Chenáb, comes a strip of country peculiar to the southern half of Shorkot. It is evidently a recent river formation. The soil is light and sandy. Water is very near the surface; and where not cultivated, the ground is covered with a dense growth of *sar* grass.

Between the Kiána Bár and the Chenáb Hithár.

The country on the right bank of the Chenáb, from the river to the high bank of the Bár, is very similar in character to that on the other side. Near the river there is the same band of well cultivation, gradually widening out to the scattered wells and large stretches of waste of the tract adjoining the Bár. The high bank of the Bár dies away a little distance east of the boundary between the Chiniot and the Jhang tahsíls, opposite the village of Kot Mohla. To the portion of the Utár lying between this ridge and the Chenáb, the description of the country cis-Chenáb may be unreservedly applied. Further west the aspect of the country, here called the Sháh Jíwana taalluká, changes. Speaking generally, the face of the country is either half concealed by a sparse growth

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Between the Kirána Bár and the Chenáb Hithár.

of *sar* grass, or appears revealed in all the ugliness of a *kallar* plain. Mr. Monckton writes of this tract :—"Here the soil is singularly "sterile : for miles one may ride over tracts impregnated with "saltpetre, and producing only dirty coarse grass, unfit for any use-"ful purpose." The wells, as might be expected in a tract of this description, are found scattered here and there over the face of the country. There are a few well-to-do villages, but most are poor, badly farmed, and owned by extravagant thriftless Sayads. This inhospitable waste does not end until the Jhelam villages are reached. The lower part of the triangle contained between the two rivers is termed in common parlance the Vichanh. Towards the apex of the triangle the country may be described as a dorsal ridge, covered with efflorescent saltpetre, between the fertile low-lying alluvial lands of the two rivers. This back-bone of extra sour soil extends as far as Kádirpur Bakhsha, and its continuity suffers but very few and very slight breaks. The country round Kot Isa Sháh, between the Jhelam and the tongue of Bár that runs down southwards, is probably the most fertile and most picturesque in the district. The soil is good, agriculture flourishes, and trees are abundant for some distance away from the river. Beyond comes another infertile tract, containing much *kallar*, and then the Bár is reached. Here there is no high ridge well defined. The expanse of *kallar* is broken in some parts by curiously fertile patches. Such an one is the village of Bhairo, bounded on the east by the Bár, and on the west by a *kallar* plain that for extent and nakedness is unequalled.

Between the Thal and the Jhelam and Jhelam-Chenáb Hithár.

The tract between the Thal and the Jhelam is called the Kachhi. Kachhi is also the name of the alluvial lands of the Indus valley, as distinct from the Thal and Damán. The word means a country that is contained within some strongly marked boundary, here the Thal. It is distinct from and must not be confounded with the Urdú *kachcha*—(unripe, unformed). To the north the Jhelam is now flowing immediately under the Thal, and the higher portion of the Kachhi, *i. e.*, that out of reach of the Jhelam and Chenáb floods, does not start fairly until the village of Sherowána is reached. Thence, as far as the Muzaffargarh boundary, the tract of Kachhi runs unbroken. This strip is, on an average, about nine miles broad. As is the case with the whole of the district, the soil gradually deteriorates to the south, and becomes worse on the Muzaffargarh border. Here the only cultivation to be found, except a well or two, lies immediately under the Thal bank in a depression. The wells are of a fairly prosperous appearance. A little *talla* grass, and a good deal of *sar*, grow in and near the depression. Between the Thal and the river the country is almost desolate. Rolling sand dunes, on which a few scant patches of *sar* grass only thrive, flat plains of the hardest and most unfruitful clay, strips glistening with the salt efflorescene, and patches of black *kallar*, locally known as *bishí*—(poisonous), from its deadly effect on all vegetable life, alternate in dreary succession. Vegetation is represented by a few starved *karír* bushes and *lání* plants. Northwards there is a decided improvement in the soil. Notably there is very much less *kallar*. Near the river the well cultivation

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Between the Thal and the Jhelam and Jhelam-Chenáb Hithár.

is dense, the country is well wooded, and agriculture flourishes. Towards the Thal cultivation becomes sparser. The wells are found in lines, the direction being determined by the presence of some depression, into which the surface drainage of the country finds its way. The soil is more fertile and cooler than the higher-lying lands. The depression under the Thal here again is studded with wells. The soil is a good loam of a reddish tint. Near the river *karír* is the predominant scrub, while near the Thal the *jál* bushes are so numerous and so large as to form a stunted forest. The separate distribution of these two shrubs is very marked. Where the two zones meet they are found intermixed ; but near the Thal hardly a *karír*, and in the river villages hardly a *pílú*, will be found. The absence of grass is the distinguishing feature of the Kachhi. In the cold weather grass sufficient to feed half a dozen horses certainly could not be procured, and probably does not exist. The bareness of the surface is most remarkable. The soil is clayey. Water does not penetrate, but drains away into some depression, where again, when the water is evaporated, the salts left behind prevent the growth of any vegetation. There is very little uncultivated land anywhere in the Kachhi that is free from the *kallar* taint.

The Upper Chenáb valley.

Mr. Monckton in a few happy sentences gives a description of the Chenáb that cannot be improved upon:—"The Chenáb "is a broad shallow stream, with a sluggish current and a licen- "tious course. Its deposits are sandy, but its flood is extensive, "and from the loose texture of the soil on its banks the moisture "penetrates far inland." The above description was made with reference to the upper Chenáb in tahsíl Chiniot. Of the lower Chenáb, Mr. Monckton wrote:—"The country on the banks of "the Chenáb is generally low and moist. The river flood extends "in many places as much as three and four miles inland at its highest "rise." The great difference in the character of the Chenáb above and below its junction with the Jhelam has never been thoroughly recognised. Above the Trimmú ferry the Chenáb is confined within well-marked banks, over which its waters rarely, and only at a few known points, ever spill. The country between the two containing banks varies considerably in width. Where the river has cut away a larger slice of the Utár, the banks become necessarily farther apart. The width and depth of the river bed has naturally an important effect on the extent and height of the floods. Often do the zamíndárs complain that the bed is far too big. Where the banks are near and the real bed of the river is not excessive in width, the greater portion of the lands between will be flooded annually. Where the distance from bank to bank is considerable, and the river channel runs in a tortuous course through the centre, the action of the floods becomes uncertain. In places the *belá* land between the river and the high bank is only naturally inundated when the set of the stream is directly towards it. When the course of the river is less favourable, the needful supply of flood water is obtained by throwing embankments across the *nálahs* by which such lands are invariably intersected, and thereby raising the water level. The deposits of the upper Chenáb

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The upper Chenáb valley.

are usually very sandy. The zamíndárs have a saying that "it takes gold and gives copper," *apropos* of the difference between the land carried away and that thrown up. The upper Chenáb deposits require successive deposits of silt before they become fit for cultivation. The inundations of the Chenáb appear to be fairly regular. Mr. Cust's picture of "wells, villages and culturable area being carried away by a merciless torrent" is an exaggerated and unfavourable representation of the Chenáb. It does possess enormous powers of erosion, but, except under particular circumstances, it takes years to cut away a village.

The lower Chenáb valley.

From the point of junction with the Jhelam the breadth annually inundated begins to expand, until in the lower portion of the Shorkot tahsíl, near Ahmadpur and Jalálpur, the river spreads out almost in fan shape, and its water flows far inland. Large islands, *belás* or *bindís* as they are called, form more frequently than to the north. The Dingí *belá* opposite Ahmadpur has already a length of 8 miles, and exhibits signs of further growth to the south. The aspect of the *sailáb* lands adjoining the river is much the same on the lower and upper Chenáb. Along the bank is found a dense belt of dark *laí (Jháú or pilchhí) jangal*, often so thick and strong that a horse could with difficulty pass through. This is intersected by numerous channels of the river, dry during the greater portion of the cold weather, but filling with any slight rise in the river. There is but little cultivation, and what there is consists of patches of wheat, *massar*, peas, or gram scattered here and there amongst the underwood. The soil is generally good, and has but recently accreted. Still its quality varies greatly. In one place the accretion has taken place only lately, and more silt must be deposited before the soil can be termed good. In another spot the soil was formed long ago; but it is still little better than a sand bank covered with a thin layer of clay, sometimes hardly more than a mere film, and here and there the sand itself crops out. Beyond this strip of *jangal* and cultivation intermixed, and between it and the bank which bounds the inundations, come the cultivated lands of the alluvial tract. The soil varies from stiff clay to sand, but is generally a good light loam, easily-worked and retentive of moisture. *Rabí* crops are chiefly grown, only the higher and lighter soils being devoted to the production of autumn crops. Below Shorkot the bank of the Utár is either wanting, or else is situate at some distance from the stream. Instead of finding a comparatively narrow strip of cultivation between the new deposits and the Utár bank, one is at once struck by the absence of any high land beyond which no flood ever passes. The country is traversed by numerous channels that carry the flood water far inland. There are broad expanses of rich *sailáb* land near the river; but these do not extend far. Beyond, high-lying strips and patches of waste land of a sandy texture, covered with a thick growth of *sar* grass, become common. The cultivated lands are found in between, wherever there is a depression that is reached by the flood water. As the river recedes, wells become more numerous. Near it there are but few. In February or March the view of this cis-Chenáb portion of the district from an

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The lower Chenáb valley.

old mound or eminence has a peaceful beauty peculiar to itself. A sea of yellow grass rippling in the breeze, edged on the west by a silver ribbon of river, are the features that first strike the eye. Dotted over the surface are dark clumps of trees round the wells, and here and there a few groves of date palms. Towards the river long stretches of green wheat are to be seen, while nearer in the cultivation is hidden from view, or only peeps out near a well or where a piece of *sailáb* cultivation larger than usual is found. Beyond the river rise dark against the horizon the trees growing round villages that fringe the further bank. Trans-Chenáb from the junction of the rivers to Ahmadpur, the *sailáb* lands are bounded by a high bank separating them from the Kachhi tract described above. At Ahmadpur the level of the country seems to sink, the bank to disappear, and the flood water of the river passing to the west of Ahmadpur finds its way by depressions and canals into the Kándíwál lake *(jhíl)* lying immediately under the high wall of the Thal.

The Jhelam valley.

The Jhelam has a course of about 45 miles in length from the point where it first touches the Jhang district down to its point of junction with the Chenáb, the Domel as it is called. As compared with the Chenáb, the Jhelum contains a much smaller volume of water, and flows in a much more confined channel. The area subject to inundation from the Jhelam is much less extensive, though in flood season the rise in the river must be considerably higher than that of the Chenáb. The erosive action of the Jhelam is quite as powerful as that of the Chenáb, but its deposits are far richer in argillaceous matter. There is more mud and less sand. A deposit of Jhelam silt often bears a good crop of coarse rice the first year it is formed. The country on the banks of the Jhelam is fertile, well wooded, densely cultivated, and supports a larger population than any other portion of the district. There is hardly any waste land. The Jhelam being a narrow stream, islands *(belás* or *bindís)* are seldom met with.

The Rávi valley.

The Rávi, which is almost everywhere fordable, first touches the district at a point only 11 miles from where it falls into the Chenáb, but the length of its singularly tortuous course between these two points must be nearly double that distance. Judging from the description of the Rávi given by Mr. Purser in the Montgomery Settlement Report, the character of the lower Rávi varies considerably from that of the upper. On the Jhang side of the river the Rávi *sailáb* lands are separated by a very high bank from the lands of the Utár. The outline of this bank is most irregular in its twists and turns, carved out as it has been by the action of this most erratic river. Below this bank lies a considerable tract of *bet* of a very uneven surface and quality, and intersected by numerous old channels of the Rávi. These are called *Budh*, or *Dhan*, and in the cold weather such of them as have not subsequently silted up and become dry, afford both water to the *jhaláns* and excellent duck-shooting. At the end of one cold weather it is impossible to predict where the river will be at the beginning of the next, beyond that it will be below the Utár bank. Its course is the most capricious and inconstant of all the rivers of this district. Ordinarily it does

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The Rávi valley.

not, like the Chenáb, flood the whole of the *sailába* lands. The extent and the locality of the floods depend solely upon the direction of the river. If it is flowing under the left bank, the chances are that the lands under the right bank will not get a drop of flood water, except the lowest-lying strips in the old channels of the river. The Rávi alluvial lands are composed of a stiff soil, very productive if it gets flood water, but hardly pervious, and but little benefited by percolation except where it is unusually sandy. The stream runs in a deep bed. The highland between the Rávi and the Chenáb is curiously similar to that between the Jhelam and Chenáb. The same bare unfruitful plain with a surface stratum of *kallar* efflorescence is found. The presence of much coarse *dabh* grass, a few patches of *sar* grass, and some infrequent *laí* bushes, give the Shorkot Viçhanh a slightly more hospitable aspect. About two miles from the Rávi and close to the Mooltan border, a thick forest of *jand* is found. This forest extends some way into the Mooltan district. Only a small portion is included in Jhang. The ground appears to be nothing but *kallar* of the rankest nature, yet the *jand* grows with a luxuriance never seen elsewhere. The site is apparently a depression, for not only does water flow down from the Útár and collect here, but sometimes the flood water of the Rávi, spilling over the bank above Chícháwatni, flows across some fifty miles of country, and finds its way by here into the Chenáb. The Rávi side does not present that appearance of fertility that characterises the Jhelam valley and the alluvial lands of the Chenáb. The upland wells are extremely poor, and there is much *kallar*. The Hithár lands betray the uncertainty of the supply of flood water.

Present canals.

Irrigation works of modern date in Jhang compare but unfavourably with the remains of those of the past. The only canal now at work is one in Shorkot, called the Wakefield Wáh. Its history is apparently this:—In 1872 Niámat Rái devised a scheme for cutting a canal from Buddhowána to Manga Afghánán. Mr. Wakefield approved of the plan, and by 1874 a canal sixteen miles long had been excavated at their own cost by the zamíndárs of the villages through which it passed. The canal has not been doing so well during the last few years. This is due partly to a change in the Chenáb stream, but more so to lack of management. Annual clearances are effected under the supervision of the Tahsíldár, but proper distribution of the water there is none. The villages near the head not only take more than their share, but allow the water to run waste in a scandalous manner. There are a few other cuts from the river in various villages made to assist and guide the flow of the flood water inland, and they are welcome signs of the birth of some enterprise among the zamíndárs. These ditches are to be found at Basti Varyám and Jalálpur, Kakkúwála, Ahmadpur, Sultán Báhn, and Havelí Bahádarsháh in Shorkot. In Jhang there is one made by the Chelás of Wású Astána, and another started by Mr. Wakefield near Jhang that has never flowed since the first year. In Chiniot there are about the same number.

Old canals.

The old canals are three. In the Vichanh the remains of an old canal of considerable size are to be seen. Local tradition says

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Old canals.

that it was a portion of the Ráníwáh canal that leaves the Jhelam in the Bhera tahsíl of Sháhpur. Nothing is known as to when the canal was constructed. The story goes that it was the work of a rich banker of Bhera, whose daughter was married to a resident of one of the Jhang Vichanh villages. The daughter, when she reached her husband's home, complained of the scanty supply of water, and her father at once cut the canal to put an end to her trouble. Another version is that the daughter vowed that she would not marry the man to whom she was betrothed, unless she could get to his house by water without putting foot to the ground; so her father forthwith proceeded to excavate this canal. The remains of the canal opposite Káilirpur Bakhsha are perhaps in the best state of preservation, and show that it was a work of some magnitude, and aligned considerably above the level of the country. In the Shorkot tahsíl the banks of an old canal that left the Chenáb a short distance east of Mírak Siál are still recognizable. The people have no tradition whatever as to its construction. The fact that the Chenáb must have been running at a very much higher level than now, and in a very different bed, before water could have been supplied to the canal, is the best evidence of its antiquity. The head of the canal takes off the old bed of the Chenáb lying between Mírak Siál and Káim Bharwána, into which now-a-days the water of the river in highest flood hardly penetrates. All vestiges of the canal are lost about a mile from the village of Shorkot. The third canal is that of Uch, constructed by Fakír Gul Imám. It leaves the river Jhelam close under Máchhíwál, and tails off into Uch. It ceased to run about the end of the 18th century, after flowing some sixty years. There are also traces to be seen in the Bár of an old canal Nannanwa, concerning which little or nothing is known by the people.

Rainfall, temperature, and climate.

The climate of Jhang does not differ from that of the remainder of the southern Punjab. Mr. Blanford states that during June, July and August the highest mean temperature prevailing in any part of India is that of the comparatively rainless tract about Mooltan, Montgomery and Dera Ismáil Khán. The intensely hot weather commences shortly after the 1st June. The *kíkar* and *bér* trees lose all their leaves in the burning heat. There is generally a fall of rain by the 15th July. A hot wind blows more or less steadily from the south and south-west during the month of June, until the advent of the monsoon current is felt, and then the winds are very variable. The nights are, if not cool, at least comfortable up to the last ten days of June, and then day and night are both equally intolerable. Jhang after general rain has a most pleasant climate. The thermometer falls, and there is little or none of that close muggy atmosphere that characterises the rain in stations with a large rainfall and moist soil. Calms are rare. If the rain ceases, as it sometimes does, or if the breaks are long, the heat becomes again intense, and hot winds have been experienced in the latter part of July. There is always a change in August in this part of the Punjab. The nights and mornings get cooler. If there is no rain in August and September, this cooling proceeds very gradually, until the cold weather commences

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Rainfall, temperature, and climate.

and *pankhás* are abandoned about the 10th October. With rain about the middle of September, the cold weather comes in much quicker. The cool bright days, the frosty nights, and the crisp fresh mornings of the cold weather of the Punjab proper, are to be found at Jhang as elsewhere. October and November are rainless. During the last week in December and in January and February rain usually falls. By the end of March the weather grows perceptibly warmer. April is hot and dry; May is hotter and drier. Table No. III shows in tenths of an inch the total rainfall registered at each of the rain-gauge stations in the district for each year, from 1866-67 to 1882-83. The fall at head-quarters for the four preceding years is shown in the margin. The distribution of the rainfall throughout the year is shown in Tables Nos. IIIA and IIIB.

Year.	Tenths of an inch.
1862-63 ..	238
1863-64 ..	185
1864-65 ..	135
1865-66 ..	117

Disease.

The district is a particularly healthy one. There is ordinarily but little fever. Cholera seldom appears, and never badly. The drinking water at Jhang, and generally along the banks of the Chenáb, is excellent. Goitre, however, is prevalent in the neighbourhood of Chiniot and the tract lying to the north-east of that town. Tables Nos. XI, XIA, XIB and XLIV give annual and monthly statistics of births and deaths for the district and for its towns during the last five years; while the birth and death-rates since 1868, so far as available, will be found at pages 42, 43 for the general population, and in Chapter VI under the heads of the several large towns of the district. Table No. XII shows the number of insane, blind, deaf-mutes, and lepers as ascertained at the Census of 1881; while Table No. XXXVIII shows the working of the dispensaries since 1877.

SECTION B.—GEOLOGY, FAUNA AND FLORA.

Geology.

Our knowledge of Indian geology is as yet so general in its nature, and so little has been done in the Punjab in the way of detailed geological investigation, that it is impossible to discuss the local geology of separate districts. But a sketch of the geology of the Province as a whole has been most kindly furnished by Mr. Medlicott, Superintendent of the Geological Survey of India, and is published *in extenso* in the Provincial volume of the Gazetteer series, and also as a separate pamphlet. And the following discussion, taken from Mr. Steedman's Settlement Report, is of such an interesting character that it is inserted here:—

"It has always been to me a curious problem—the origin of this Thal sand. If there were any continuous stretches of sand hills on the left bank of the Jhelam, the question might be more easily understood, but there are not. I only know of one small portion of the Vichanh Bár where there are sand dunes, and this is due east of Kádirpur Bakhsha. To the east of the Chenáb, below its junction with the

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Geology.

Jhelam, there are no doubt sand hills here and there, such as are met with east of Gilmála, in Pírwála and elsewhere; but otherwise the tract in no way resembles the Thal. The sand hills of Gilmála and Pírwála seem to have most probably been formed from sand deposited in an old bed of the Chenáb that is found near. The remarks at pages 436-439 of the Manual of Indian Geology should be consulted for a further insight into the formation of deserts such as those found in Sind and Rájpútána, which do not apparently differ much from the Thal, except that there the direction of the parallel lines of sand hills is north-east and south-west, while, according to the Sháhpur Settlement Report, p. 11, they here run north-west and south-east. Native traditions attribute the presence of the sand to the action of the strong south wind that prevails during the greater part of the year, in blowing up the sand of the Indus bed. The authors of the Manual write of the Rájpútána desert :—'It appears difficult to believe that all the sand found in the desert can have been derived from the Indus.' The same difficulty occurs in respect of the Thal sand. 'The most probable theory appears to be that the Ran of Cutch, and the lower portion of the Indus valley, have been occupied by the sea in post-tertiary times, and that the sand of the desert was derived from the shore. The most sandy tracts, as has also been shown, are on the edge of the Indus valley * * * and these portions of the country were all probably situated on the coast.' 'It is probable that the central portion of the desert was *land*, whilst the Indus valley, the Ran (of Cutch) and the Lúní valley were occupied by sea.' The accumulation of sand in a desert region is evidently due to the low rainfall and the consequent absence of streams, the effect being intensified by the accumulation of sand and the porous nature of the resulting surface. In other parts of India, the sand blown from the river channels or the sea coast is either driven by the wind into other river channels, or is swept into them again by rain.*

"It is easy to follow these remarks in connection with the presence of sand in the upland of the Sind Saugor Doáb, but what in the case of the Jhang district requires an explanation, is the comparative absence of sand in the two neighbouring Doábs between the Jhelam, Chenáb and Rávi rivers, in fact the comparative absence of sand between the Thal and the Bíkanír desert on the east of the Sutlej. The alluvium of the Kirána and Sándal Bárs and that of the Sind Saugor Thal on which the sand dunes rest, are probably of the same age, though I speak with extreme diffidence; and if this is the case, why are there not the same accumulations of sand? Did the sands of the Bíkanír desert and those of the Thal once join, and have the Punjab rivers since cut their way through them, the uplands of the Bár having been first deposited and subsequently cut through at a later period? Where the Jhelam enters the district it runs alongside, and is cutting away the high bank of the Thal. Thence due west, as far as the Indus Kachhi, there is nothing but the most sterile waste of monotonously parallel sand dunes. Cross the river, and with the exception of the few mounds of sand mentioned previously, a flat plain of stiffish soil, here and there lightening down to sandy loam, is traversed until the Chenáb is met. It seems possible to account for the absence of sand by the decreting action of the rivers, on the hypothesis that the sands of the Bíkanír desert and those of the Thal were in past ages continuous, and that the Chaj and Rechna Doábs, lying as they do at a lower level, were subsequently deposited by

* Mr. Medlicott writes.—"These remarks, so far as they refer to sea, can have no application to any Punjab ground. This sand is essentially recent; and its partial distribution may, I think, be mainly attributed to the capricious action, not yet fully understood of the wind."

fluvial action that had first eroded and carried away the sands. This, however, gives a higher* position in the geological era to the Sind Saugor Doáb than is allowed by the Indian geologists; and of course my suggestion is little else than a guess suggested by the levels, the lie of the country, and the identical character of the sand in the two deserts, separated from each other by the Punjab portion of the Indus drainage system."

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Geology.

There are no mines in the district. There are several quarries in the hills near Chiniot, where millstones, pestles and mortars, *dabgars'* and *mochis'* blocks, kneading boards, oil pans for lamps, &c., are made. There are no other metal or mineral products. There are no *kankar* beds in the district. The Kirána hills are stated to contain iron ore, but it has never been worked. Some freestone was quarried near Chiniot and sent to Lahore for use in some of the Government buildings.

Mineral products.

Among the trees of the district the *kíkar* (*Acacia Arabica*) is the most common and the most useful. It grows most luxuriantly in the Hithár villages on both the rivers, but is found in greater quantities on the Jhelam and upper Chenáb than further south. *Kíkar* wood is of excellent quality, and is used for almost every agricultural purpose. More especially it is almost invariably used for the horizontal and vertical wheels, the axle of the vertical wheels, and other portions of the machinery of a Persian-wheel. As a young tree, it is exposed to some danger from frost, but as it ages, cold has less effect. It grows wonderfully quickly, and this is the principal reason why zamíndárs prefer it to the *shísham* (*táhlí*). A number of young *kíkars* will be found on almost every well scattered over the area attached, but the *shíshams* will only be close round the well. The pods of the *kíkar* and the loppings are eaten greedily by sheep and goats, and in years of drought the tree is hacked and pruned in a most unmerciful manner. The shade of the *kíkar* is peculiarly harmful to vegetation. Nothing will grow under it. The bark is used for tanning and distilling spirits. The cypress-formed or *Kábuli kíkar* (*Acacia cupressiformis*) is also found scattered over the district; it is valued less than the *kíkar*. The *shísham* or *táhlí* (*Dalbergia sissu*) is found wherever there is cultivation, but is more abundant in the lowlands fringing the rivers than in the Utár. The tree does not do well until its roots get down to water, and this takes place much sooner in the tract near the rivers than in the uplands. Shorkot way, almost every well in the Hithár boasts a clump of *shíshams*, and many are extremely fine trees. There are apparently two varieties of the *táhlí*,—one growing straight, and the other with the boughs drooping. The *Bér* (*Zizyphus jujuba*) is a hardy tree, and will grow anywhere, though it prefers the soil of the Hithár. It is considered unlucky to cut down a *bér*, and its fruit, when ripe, is gathered by every passer-by. The fruit is highly esteemed and largely eaten by the poorer agriculturists. Careful housewives

Trees. The *kíkar*.

The *Shísham*.

The *Bér*, *Siris* and *Fardsh*.

* Geologists would say "lower," *i. e.*, "older." But Indian geologists have fixed the relations referred to by the use of the term "old alluvium" for these highlands, the remains of the prehistoric forest-clad plains, before the concentrated drainage waters were driven to prey upon these deposits and form the "new alluvium" or river valleys.—*Editor*.

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collect and store large quantities of the berries when the crop is a good one. The fruit has a not unpleasant rough acid taste. It ripens about March. The *siris* (*Acacia speciosa*) is rarely met with, and only near wells. It is a useless tree, but affords a good shade.

The *Bér*, *Siris* and *Farásh*.

The *ukánh* or *khagal*, or *farásh* (*Tamarix orientalis*) is not common anywhere except in the Bár and the Kachhi. Those in the Kachhi are of a gnarled stunted growth, and never attain any size except near wells, and the zamíndár does not often choose to grow the *ukánh* on his cultivated lands. In the Bár, wherever water collects or the soil is better and more moist than usual, the *ukánh* is sure to be found. A typical instance is to be found on the Chícháwatni road to the east of Roránwáli. The wood of the *ukánh* is hard, and is used in a variety of ways. *Laí*, the *jháú* of Hindustán, is found in great quantities along the river banks. It is used to make the wattle cylinders with which *kachcha* wells are usually lined. Near Jhang and Maghiána it is cut and used for firewood. In the Jhang tahsíl the *sohánjna*—horse radish tree (*Moringa pterygosperma*)—is found on almost every well. The fruit is preserved and used for *chatnís* and as a pickle. The tree is pruned regularly every year until it resembles a polled willow more than anything else. In Shorkot and Chiniot this tree is found, but not so abundantly. In the Civil Station some very fine old *jand* (*Acacia leucophelea*) trees are to be seen. Elsewhere the stunted bush is usually the form in which this tree presents itself. A *jand* shrub is always a sure sign of good soil, whether in the Hithár or Utár. It is unusual to find *jand* scrub in the Hithár, but there are a few such tracts in the southern tahsíl. Like the *ukánh*, the *jand* in the Bár prefers a moist lowlying position. The *jand* is usually a bush, but in the more favourable localities it becomes a small tree. The peculiarly dense growth of *jand jangal* in the south-east corner of the Shorkot tahsíl has already been noticed. Here, though the surface of the soil is covered with *kallar*, the soil itself is good. The *kallar* has been washed on as a foreign substance in suspension and solution by the Rávi flood water or by the drainage from the saline upland of the Bár, and subsequently deposited by evaporation in or on the soil. The *jand* makes very good firewood, and affords capital grazing to camels, sheep, and goats. The *wan*, *jál*, or *pílú* (*Salvadora oleoides*)—for by all three names is this tree known—is found in every part of the district. Individual trees of the largest size are found in the Kachhi and the Bár. There are two kinds of *jál*—the sweet and the sour, but the sour is very seldom found. The leaves of the *káura jál* are darker in colour and longer and broader than those of the *miththá jál*. The tree is much used by the cattle-thieves of the Bár as a place of concealment for stolen animals. It is impossible to discover the animal except by the closest scrutiny, and precautions are carefully taken against any movements on his part. The roots of the tree are the favourite home of the cobra. As fuel the wood is detestable. It leaves an enormous quantity of ash, has an extremely disagreeable smell, and gives but little heat. Its leaves are the favourite diet of camels during the first quarter of the hot weather. They act as a cooling alterative.

The *Jand*.

The *Jál* or *Pílú*.

The *Jál* or *Pílú*.

The fruit, the berry called *pílú*, is much prized by the poorer classes. *Pílú* is used both of the tree and the fruit. It is equally correct to speak of the *pílú* tree and of eating *pílú*, but it is incorrect to talk of eating *wan* or *jál*. The berry usually ripens shortly after the 15th Jeth (1st June). In 1880, there was a magnificent crop of berries that ripened a month earlier than usual, and thoroughly appreciated it was by the poor classes, with wheat selling at 10—12 seers for the rupee, and harvest below the average. They lived for nearly two months among the *jál* trees with their flocks, and consumed scarcely anything but *pílú* berries and milk. The berry is supposed to be a cooling diet. The shade of the *jál* is esteemed as being particularly cool and a thoroughly good protection against the sun, and the day is passed therein. The flocks are very fond of the berry also, and it is supposed to increase both the sweetness and the supply of milk. Quantities of the fruit are dried and stored.

The *Karír*.

The *karír* bush (*Capparis aphylla*) is found alongside the *jál* in every portion of the district. The Kachhi and the Bár are its favourite habitats. It affords grazing to sheep and goats, and when hard pressed, cattle eat or chew the twigs. It bears a pinky white flower, *bútú*, and when in blossom the Bár assumes for a few days quite a gay appearance. The fruit (*dehlú*) is but little used in this district. It is eaten when ripe, but the zamíndárs hardly talk about the crop; or if they do, never in the same terms or with the same interest as the *bér* and *pílú* berry crop is discussed. The unripe berry is made into pickle, and also is much esteemed as a tonic (*masálah*) for horses. The *karír* wood suffers less from white ants than other indigenous timber, but it does not enjoy perfect freedom from their attacks. It is used as rafters for houses, and for the spokes of the wheel on which the well pots are strung. All the more important indigenous trees and shrubs have been enumerated and described above.

Other trees.

Among the other trees besides the fruit-bearing ones, are the *bohár* (*Ficus Indica*), the *pípal* (*Ficus Religiosa*), the *bakáin* (*Melia Azedarach*). The *bohar* thrives in a wonderful way in the tract near the rivers. One celebrated tree, *Pír ka bohar*, was carried away by the river Chenáb some 11 years ago. It was situated in the village of Haveli Mohangir, and its shade covered over half-an-acre, not the many acres mentioned by a correspondent of the Agri-Horticultural Society, noted at page 213, Stewart's Punjab Plants. The *pípal* is found, like the *bohar*, throughout the district, but less frequently. The *bakáin* is found here and there alongside a well, but not often. Other less common trees are the *barna*, the *amaltás* (*Catharticarpus fistula*), the *phuláhí* (*Acacia Modesta*), the white *siris* (*Acacia elata*), and the *jáman* (*Sizygium Jambolanum*). In some of the *belás*, and more especially just above the junction of the Jhelam and Chenáb, a few specimens of the *bahn* (*populus euphratica*) are found. In Jhang the local name is *ubhán*. The mango, mulberry, peach, apple, orange, lime, pomegranate, lemon, grape, plum, guava, &c., are the fruit trees. The mangoes are generally inferior. Most of the better zamíndárs have each his *bágh* or mango orchard. Oranges and limes succeed very well, but the other fruits are not good. The date palms of the district will be noticed in Chapter V.

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Shrubs.

Among plants are found the *ak*, *búín*, *khip*, *phog*, *lánd*, *lání*, *khár*, *jawánh* or camel-thorn, *munjkána*, *khán*, *harmal*, *bhúkil*, thistle. The *ak* can hardly be termed a useful plant. When reduced to great extremity, goats and deer eat the leaves. *Búín* and *khip* no animal eats. Mr. Monckton says paper was made of *khip* in the Jhang jail. It certainly is not put to this use now, though experiments may have been made with the plant in former days. All enquiries have been met with one answer, that it is valueless. *Phog* comes in the same category. It is found chiefly in the Thal or the sandy tracts of the Bár. It is seldom eaten by cattle. *Lání*, *lání* and *khár* are all found in this district. There are two kinds of *lání*—*gora* and *mithar*. Mr. Steedman writes:—

Lání, lání, khár.

"*Lání* is evidently the *gora lání* of the Montgomery Settlement Report, and *lání* the *mithar lání*. I cannot quite follow the notes in the 'Punjab Plants,' and I fancy the writer was not perfectly clear as to his facts. *Anabasis multiflora* is apparently *mithar lání* or the *lání* of Jhang; but what salsolas are the *Garoxylon fetidum*, and *Swæda fruticosa!* The latter is probably the *lání* or *gora lání*. *Caroxylon Griffithi* is the *khár*. There is a considerable disagreement as to what plant or plants *sajji* is made from. In the Jhang district *sajji* is made from *khár* only. I have made repeated enquiries, and have always received the same answers, that *sajji* is made from *khár*, but that sometimes, as sugar is sanded, and as a variety of jams are partly made from turnips and decayed figs, so is the bulk of the *sajji* increased by burning *lání* with the *khár*. I have been constantly in camp at the time the *khár* is cut, and I have never seen a single bundle of cut *lání*, and such adulteration is very uncommon. All four plants are excellent grazing for camels. *Khàr* is the best, and *lání* the worst. *Khàr*, Mr. Monckton happily phrases it, forms a useful alterative in the diet of camels that graze in the Bár. *Lànà* forms the staple food of the camel for at least 8 months in the year. During May, June and July the *jàl* is browsed, and then *lànà* grazing commences."

Other shrubs.

The process of manufacturing *sajji* is described in the Sháhpur Gazetteer, and in "Punjab Products," pp. 86-88. *Jawánh*, *jawasa* camel-thorn, is found most abundantly in the waste and fallow lands subject to inundation from the rivers. It is a popular error to suppose that camels eat it. As a rank weed, it does much harm to cultivation. The thistle, *leh*, is another weed that springs up in old *sailáb* lands. *Harmal* and *bhúkíl* are two weeds characteristic of the Kachhi well cultivation. *Harmal* grows chiefly on fallow lands. *Bhúkíl* loves a light sandy soil, springs up with the crop, and chokes it.

Sar, munj, káná.

The plant *saccharum munja* is so characteristic of the Chenáb valley, and plays so important a part in agriculture, that it deserves separate and special notice. It is found but infrequently on the Jhelam. The Jhelam soil is too good to be left to grow *sar* only. Along the Chenáb there is hardly a single village in which it is not to be seen. The area under *sar* increases as one goes south. There is more *sar* in Shorkot than in Jhang, in Jhang than in Chiniot. The difference in the country before and after the *káná* or flower stems are cut is astonishing. In October and November, in the tracts where this plant grows, the view is closed in on every side by the flower stems, and a bird's-eye view of the lie of a

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Sar, munj kaná.

village is impossible. The leaves *sar*, the flower stems *kánd* and *tílí*, the stem sheaths *munj*, are all parts of the same plant, *búta*. The leaves are used for thatching houses, the *kánd* reeds being bound round the edges and across to strengthen the thatch. In the cold weather they are often the only pasturage of the cattle. They are also cut, chopped up, and mixed like *bhúsa* with grain, oil cake, or green stuff. In the early spring the grass is fired, and the cattle graze on the green shoots that quickly sprout again. Only the inferior patches of *sar* are treated thus, as the plant seldom produces *munj kánd* after being burnt. The dry *sar* leaf is not very fattening, but it serves to keep the cattle in condition, and to have *búte* plants inside the village boundary is always considered a great advantage. The *kánd* reeds are used for a variety of purposes, for strengthening thatch, for making chairs, couches, and stools, for the frame-work of *bhúsa* stacks, *pallá*, &c. The upper portion of the stem, *tílí*, is the portion broken off, the sheath of which is made into *munj*. The sheath of the lower portion of the stem is never so used. The *tílí* is made into *sirkí* and mats, and is also used for the manufacture of winnowing trays, baskets, &c. *Munj* is the most valuable of all the products of this plant. The manufacture of the *munj* into rope may be seen almost any day in any jail in the western Punjab. The lower ends of a bundle of the petioles are first burnt, then they are pounded into fibres, and lastly twisted into a rope. The ropes used in agriculture are made almost entirely of *munj*. The well ropes, the ties that attach the well pots to the rungs of the well rope, the string portion of *chárpáis*, are all made of *munj*. Several villages have of late commenced to sell their *munj kánd*, and large sums are realised. The zamíndárs say there are two kinds of *sar*,—the white and black. The black has a broader and darker coloured leaf, and gives the longest and stoutest *kánd*. The white *sar* plant is better grazing, and produces better *munj*. It is, however, probable that they are one and the same plant under different conditions. The white *sar* is found in lighter soils than the other kind. The *kánh* (*saccharum spontaneum*) is only found in the moistest portions of lands adjoining the rivers. It is most valuable pasture for buffaloes. The zamíndárs go so far as saying that if there were no *kánh* there would be no buffaloes. It makes the thickest *jangal* in the district, and is much liked on that account by wild pig. Pens are made from it. It is too valuable to be used for thatch.

Kanh.

Grasses.

As the well-being of the people of this district is so intimately connected with the existence of good pasturage, it will be useful to give a list of the principal grasses, with a few remarks. *Chhimbar* is the most common grass in the Bár, and appears to thrive in every kind of soil,—sandy, clayey, or saline. With good rain it attains a fair height, and is very dense in growth. It is one of the best. *Lamb* is a feathery grass of average quality, and is found growing in *kallar*. *Kúrya* is uncommon. It is a first-class grass. Horses do particularly well on it. *Lunák* is a tall upstanding grass, requires a good deal of rain for a good crop, grows in *kallar*, and is a first-class grass. *Garham* is not unlike

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Grasses.

lunák in appearance, but grows higher and stronger. It is not found in *kallar*, but usually under bushes and where dung has fallen, and is inferior in quality. *Khar madhána* is a small grass, with seeds shaped like a wood-louse, inferior in quality. *Dháman* is the best of all grasses. It is found in the largest quantities in the north of the district. To the south it is rare. It requires a good soil, and will not grow in *kallar*. The zamíndárs complain that the *dháman* is becoming scarcer and scarcer, and attribute the scarcity to the frequent failure of the rains during late years, but it is doubtful whether this idea is correct. It is a thick, juicy, pale green grass, and grows to a considerable height in favourable years. This grass, the zamíndárs believe, if in good condition, gives a semi-intoxicating effect to the milk of buffaloes who graze on it. *Pilán* is another good grass. It is the principal grass of the police *rakh* not far from Jhang, and makes excellent sweet hay, not so fragrant or tender as English hay, but still not to be despised. It is found mixed with *chhimbar* and *kheo*. *Kheo* is remarkable for the speed with which it springs up after rain, resembling *murak* in this quality, but otherwise it is a better and larger grass. *Murak* sprouts out in lowlying moist places after rain. Its leaves are not unlike those of the *dabh*, but are narrower and grow straight up. Among the prostrate grasses are the *aletí*, *dodhak*, and *kilánj*. All three are very hardy, and seem to do best in seasons of drought. They are dug up and given to cattle. Sheep and goats graze them on the ground. There are only two other grasses of the Bár that require notice,—the *khawí* and *panhí*. The *khawí* grows in hollows where water collects, and seems to prefer *kallar*. There is any quantity of it round Tobha Tek Singh. It has a peculiar fragrant smell, and is of a dark brownish-red colour. Cows graze upon it if hard pressed, but not otherwise. It contains little nutrition. The Bár housewives use wisps of this grass to clear out vessels used for churning or holding milk. The *panhí* is a very different plant, and is described roughly at p. 253, "Punjab Plants." It, like the *khawí*, grows in hollows and depressions, but selects only the best soils. It is never seen in *kallar*. It grows in tussocks like the *sar* grass, but instead of drooping its leaves, stand out straight and stiff. Its roots are very long and tough. They are used for making ropes, and also for the brushes used by the weavers for arranging the threads of the web. *Khaskhas* is obtained from the roots of the *khawí*.

Wild animals and game.

The beasts of prey found in the district are the wolf, the hyena, the wild cat, and lynx. Wolves are numerous both in the Sándal and the Kirána Bár. The hyena is not so often seen. The name of *bár-billa* is applied both to the long and short-tailed wild cats. The one is the domestic animal run wild, and the other is a true lynx. The first attains a much larger size than the domestic cat, and is remarkably fast. The lynx is a stouter animal. Another animal frequently met with is a kind of badger, a most hideous-looking creature—vernacular name, *bijjú*. In the interior of the Sándal Bár and between Ghapni and Khuriánwála, there are some droves of wild ponies. They are the offspring of escaped domesticated animals. Major Harcourt had one that was driven with

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another horse in a pony carriage. A remarkable but a true story is told of another of these ponies that got loose at Siálkot and found his way back to his old haunts at Ghapni. The parents of these wild ponies are said to have escaped in the fights between the Káthiás and Bharwánás. For the five years ending 1882, Rs. 1,195 were paid in rewards for the destruction of 345 wolves, and 570 snakes.

As a sporting district, Jhang is not particularly good, and yet not bad. Black buck are only found in one portion of the district, between the Kirána hills and the Sháhpur district. There are none in the Sándal Bár included in this district, except perhaps a few near the Gujránwála boundary. Ravine deer are plentiful in the Bár. They especially affect the tract near Tobha Tek Singh and Ghapni, where there is very little cover. They are extremely wary, and it is very difficult to get within shot of them. In the Kirána Bár also, ravine deer are common, but not in such quantities as on the other side of the Chenáb. There are one or two places in the Kachhi near the Thal where they are generally to be found. *Páhrá*, or hog deer, are found in almost all the large *beláis* on the Chenáb. There are a good number in Shorkot, a few in Jhang, and hardly any in Chiniot. Jackals are found in great numbers along the Chenáb. There are not very many in the Bárs. The Kirána hill swarms with them, and the *fakírs* give them a daily dole. Seeing the jackals fed is a remarkable sight. One of the *fakírs* stands on the edge of the wall and shouts, "*O gidro, gidro, ao! ao! ao!*" and the jackals seem to spring out of the ground by magic. Where nothing could be seen but a steep bare hill side, is suddenly thronged by 20 or 30 jackals. Bits of *chapáti* are then thrown down to them, and the way in which they scamper down hill after the pieces is wonderful. Foxes are found all over the district. There are two distinct kinds, one fox is of a very light yellowish-brown colour, so as to be almost indistinguishable from the colour of the ground after drought, with a curved sabre-shaped brush of a darker shade on the upper than on the lower side, and ending in a white tag. The second kind is very much darker in hue, and has a perfectly straight brush with a black tag. This species is more compact in form, with a stouter body than the first. Both foxes give capital sport, but the light-coloured one has better staying powers, and is also faster than the other. Numbers are to be found in the tract of Bár adjoining the civil station. Hares are found more or less all over the district. In Chiniot there are but few, except in the interior of the Bár beyond Sháhkot, where they are plentiful. In the Vichanh they are seldom met with. There is a very good supply all along the Chenáb on the left bank. On the right bank the cultivation is too dense. The hare found in the moist alluvial lands adjoining the rivers is small in size, and does not afford good coursing. It has neither speed nor stamina. The hares of the Utár and Bár give excellent sport, but the Kachhi and Thal hares are supposed to be the hardiest of all. There are a great number of pig in the *jand jangal* of Bhera and the adjoining portion of Mooltan. From here they spread into the dense *jangal* that extends from Jalálpur to Alahyár Juta, and

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Wild animals and game.

the various thick *belás* on the river. But the country is bad for riding. Pig are found now and again in Bela Baggar near the junction of the two rivers, and in one or two places above Jhang, and there are pig in the Sándal Bár near Sángla.

Among game-birds, the bustard, *tukdar*, the *houbàra*, *gurain*, *guraini*, sandgrouse, coulon, geese, ducks, and quail are annual visitors. The larger bustard is found in the Sándal Bár, but is very rare. The *houbàra* (pronounced *obàra* here) is plentiful in the cold weather all over the district. They are found in the *kallar* plain round Tobha Tek Singh in as great numbers as anywhere. The lesser bustard is also seen near the sadr station. Coulon (*kúnj*) come in with the cold weather in great numbers. They are found principally in the Hithár. Geese come in later than coulon, and are particularly fond of the banks of the Jhelam and the lower Chenáb. They seem to like particular localities, and may be seen in great numbers in Alikhanána and Rashídpur west of the Chenáb, and in Dabh Kalán and Kachcha Kabíra on the left bank. There are very few duck, and still fewer snipe in the district. There is only one small pond in the whole of the Chiniot tahsíl where duck are, as a rule, to be found. In Jhang they are equally scarce. It is only in Shorkot on the *budhs* of the Rávi that good shooting can be obtained. The best *dhans* are in Nalera and Khutpur Sanda. Teal, spotted-bills. mallard, white-eyes, shovellers, gadwalls, are the commonest kinds. Quail are plentiful both in spring and autumn. The autumn shooting is the best, and certainly the most enjoyable. The larger sandgrouse is found in large numbers all over the district in November and December. It is quite a sight to see the flocks flying to and from the Chenáb for their morning's drink. After December a fair number still remain, but not so many as before. The pin-tailed grouse has also been shot in the district, and the common sandgrouse stays all the year round. There are very few black partridges in the district. In the Shorkot tahsíl, but nowhere else, are there places where a few shots can always be got. The grey partridge is found infrequently all over the district.

Fish and Fisheries.

Fishing is not practised generally as a profession, upon either the Jhelam or the Chenáb. At Lalera, however, in the extreme south of the district, a few families devote themselves to fishing, and fish are sent from this place for sale at Mooltan.

Reptiles.

The snakes most common in Jhang are the *Karet* and Cobra. In the Bár many and wondrous snakes are said to exist. The following are among the most venomous:—*Karundia*, *Khapra*, *Khan*, *Sangchúr*, *Phanniar* or *Chhajliwála*, the Cobra, *Bindo-a* and *Garra*.

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Ancient history.

Considerable interest attaches to the early history of this district, from the identification, now placed beyond a doubt, of the ruins upon a small rocky hill, near the border of the district towards Gujránwála, with the Sákala of the Brahmans, the Ságal of Buddhism, and the Sangala of Alexander's historians. The identity of the three places had long ago been recognized, but the position has been only recently determined. Fortunately for the cause of history, the place was visited, in A.D. 630, by the Chinese pilgrim Hwen Thsang. Both Arrian and Curtius apparently place Sangala to the east of the Rávi, but the itinerary of Hwen Thsang shows that it was to the west of that river, as nearly as possible in the position of the small hill known in modern times as the Sángláwála Tibba.* The discrepancy is probably to be thus accounted for:—Alexander is stated by both Curtius and Arrian to have been in full march for the Ganges, when he heard "that certain free Indians and Kathæans† were resolved to give him battle if he attempted to lead his army thither." He no sooner heard this than he immediately directed his march against the Kathæans, that is, he changed the previous direction of his march and proceeded towards Sangala. This was the uniform plan on which he acted during his campaign in Asia, to leave no enemy behind him. When he was in full march for Persia, he turned aside to besiege Tyre; when he was in hot pursuit of Bessus, the murderer of Darius, he turned to the south to subdue Drangiana and Arachosia; and, when he was longing to enter India, he deviated from his direct march to besiege Aornos. With the Kathæans the provocation was the same. Like the Tyrians, the Drangians, and the Bazárians of Aornos, they wished to avoid rather than oppose Alexander; but, if attacked, they were resolved to resist. Alexander was then on the eastern bank of the Hydraotes or Rávi, and, on the day after his departure from the river, he came to the city of Pimprama where he halted to refresh his soldiers, and on the third day reached Sangala. As he was obliged to halt after his first two marches, they must have been forced ones of not less than 25 miles each, and his last may have been a common march of 12 or 15 miles. Sangala, therefore, must have been about 60 or 65 miles from the camp on the bank of the

* The following account is abridged from General Cunningham's Archæological Report, vol. II., pp. 192, 200. Further information will be found at pp. 179 to 191 of the same author's Ancient Geography of India.

† The Kathæans have been identified with the Jat clan of Káthia, whose territory is in the modern district of Montgomery. The history of the tribe has been discussed in the account of that district—See Gazetteer of the Montgomery district.

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Hydraotes. Now, this is the exact distance of the Sangala Hill from Lahore, which was most probably the position of Alexander's camp when he heard of the recusancy of the Kathæi. General Cunningham believes, therefore, that Alexander at once gave up his march to the Ganges and recrossed the Rávi to punish the people of Sangala for daring to withhold their submission.

Sángláwála Tibba.

Sángláwála Tibba is a small rocky hill forming two sides of a triangle, with the open side towards the south-east. The north side of the hill rises to a height of 215 feet, but the north-east side is only 160 feet. The interior area of the triangle slopes gradually down to the south-east, till it ends abruptly in a steep bank 32 feet above the ground. This bank was once crowned with a brick wall, which can still be traced at the east end where it joined the rock. The whole area is covered with brick ruins. The bricks are of very large size, 15×9×3 inches. During the last fifteen years these bricks have been removed in great numbers. Nearly 4,000 were carried to the large village of Marh, six miles to the north, and about the same number must have been taken to the top of the hill to form a tower for the survey operations. The base of the hill is from 1,700 to 1,800 feet on each side, or just one mile in circuit. On the east and south sides the approach to the hill is covered by a large swamp, half a mile in length and nearly a quarter of a mile in breadth, which dries up annually in the summer, but during the seasonal rains has a general depth of about 3 feet. In the time of Alexander this must have been a fine sheet of water, which has been gradually lessened in depth by the annual washings of silt from the hill above. On the north-eastern side of the hill there are the remains of two large buildings from which old bricks were obtained by General Cunningham, of the enormous size of 17½ × 11 × 3 inches. Close by there is an old well, which was lately cleared out by some of the wandering tribes. On the north-western side, 1,000 feet distant, there is a low ridge of rock called Munda-ka-pura, from 25 to 30 feet in height and about 500 feet in length, which has once been covered with brick buildings. At 1¾ mile to the south there is another ridge of three small hills called Arna or little Sangala. All these hills are formed of the same dark grey rock as that of Chiniot and the Kirána hills to the west of the Chenáb, which contains much iron, but is not worked on account of the want of fuel. The production of iron is noticed by Hwen Thsang.

The Bráhminical accounts of Sákala have been collected from the Mahábhárata by Professor Lassen.* According to that poem, Sákala, the capital of the Mádras, who are also called Jártikas, and Báhikas, was situated on the Apagá rivulet to the west of the Irávati or Rávi river. It was approached from the east side by pleasant paths through the *pílú* forest. The country is still well known as Mádrades or the district of the Mádras, which is said by some to extend from the Biás to the Jhelam, but by others only to the Chenáb. The Apagá rivulet, General Cunningham

* Pentapotamia Indica. pp. 73 and 74.

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recognizes in the Ayak Nadi, a small stream which has its rise in the Jammu hills, to the north-east of Siálkot. Near Asarúr (in Gujránwála) the bed of this stream divides into two branches, which, after passing to the east and west of Asarúr, rejoin at 2½ miles to the south of Sángláwála Tibba. Near Asarúr and Sangala, the Ayak is now quite dry at all seasons, but there must have been water in it at Dhakáwála only 24 miles above Asarúr even so late as the reign of Sháh Jahán, when his son Dára Shikoh drew a canal from that place to his hunting seat at Shekhupura, which is also called the Ayak or Jhilri Canal.

The Buddhist notices of Sákala refer chiefly to its history in connection with Buddhism. A legend is told of seven kings who went towards Ságal to carry off Prabhávati, the wife of King Kusa; but the king, mounting an elephant, met them outside the city and cried out with so loud a voice, "I am Kusa," that the exclamation was heard over the whole world, and the seven kings fled away in terror.* But there is no other mention of Sákala until A.D. 633, when it was visited by Hwen Thsang, who describes the neighbouring town of Tse-kia as the capital of a large kingdom, which extended from the Indus to the Biás, and from the foot of the hills to the confluence of the five rivers.†

The classical notices of Sángala are confined to the two historical accounts of Arrian and Curtius and a passing mention by Diodorus. Curtius simply calls it "a great city defended not only by a wall but by a swamp (*palus*)."‡ But the swamp was a deep one, as some of the inhabitants afterwards escaped by swimming across it (*paludem transnavere*). Arrian calls it a lake, but adds that it was not deep, that it was near the city wall, and that one of the gates opened upon it. He describes the city itself as strong both by art and nature, being defended by brick walls and covered by the lake. Outside the city there was a hill which the Kathæans had surrounded with a triple line of carts for the protection of their camp.§ This little hill may probably be identified with a low ridge to the north-west called Mundakapúra, which would certainly appear to have been outside the city walls. The camp on the hill must have been formed chiefly by the fugitives from other places, for whom there was no room in the already crowded city. The Greeks attacking this outpost carried the first and second line of carts, and drove the defenders back within the city walls. Then using the carts to form a barrier round the margin of the lake, they commenced the siege of the city itself. The Kathæans made an attempt to escape by night across the lake, but were checked by the barrier of carts, and driven back into the city. The walls were then breached by undermining, and the place was taken by assault. The loss of the Kathæans is stated

* Hardy's Manual of Buddhism, p. 263, note.

† See Gazetteer of the Gujránwála district.

‡ Vita Alexandri, IX., I. "ad magnam deinde urbem pervenit, non muro solum sed etiam palude munitam."

§ Anabasis, V. 22.

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by Arrian to have been 17,000 slain and 70,000 prisoners. Curtius with more probability gives it as 8,000 slain.

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Hwen Thsang, when he visited Sákala in A.D. 630, found the walls completely ruined, but their foundations still remained, showing a circuit of about 3½ miles. In the midst of the ruins was a small portion of the old city, still inhabited, about one mile in circuit. There was a Buddhist Monastery of 100 monks, and two Buddhist topes, or *stupas*, one of which was the work of the famous king Asoka.

Shorkot.

Another town of considerable historical interest in this district is that of Shorkot. It is identified with great probability by General Cunningham with one of the towns of the Malli,* attacked and taken by Alexander, and with a city visited in the 7th century by the same Hwen Thsang to whom history owes the identification of Sángala. The narrative of the campaign against the Malli has been given in the account of Mooltan.† For an account of the city, see Chapter VI, heading "Shorkot." At the time of Hwen Thsang,‡ Shorkot was the capital town of the central district of the Punjab, bounded on the north by the Province of Táki,§ on the south by Mooltan, and on the west and east by the Indus and the Sutlej The circuit, as stated by Hwen Thsang, was 833 miles, but General Cunningham shows that it cannot have exceeded about 530 miles. ||

Location of tribes.

For a clear account of what little is known of the modern history of this district, it is first necessary to describe the localities of the various tribes who have from time to time played their small parts The Siáls occupy the whole of the country on the left bank of the Chenáb, from the southern boundary of tahsíl Chiniot to the Rávi On the right bank of the upper Chenáb a comparatively small tract only is held by them, lying south of a line drawn from the boundary of Kot Khán to the southern boundary of Shah Jíwana. On the Jhelam's right bank, below a point opposite to the northern boundary of Kot Khán, the Siál villages are few; but from its point of junction with the Chenáb down to the Muzaffargarh district, there is along the river an almost unbroken chain of Siál villages. Away from the river most of the villages are the property of Beloches. In what is now the Chiniot tahsíl on the left bank of the Chenáb, the Chaddhars inhabit the tract between the Siál country and the villages of the Sayads of Rajoa. Beyond them come a motley mixture of Sayads, Harals, Khokhars, and miscellaneous Jats The tribal limits west of the Chenáb in the Chiniot tahsíl are remarkably clearly demarcated. The Bhattís, Lálís, and Nissowánas hold the whole of the northern portion in the above order, from a few miles beyond the Jhang tahsíl boundary to that of the Sháhpur district. Below these tribes along the river bank

* See Gazetteer of the Mooltan district.

† See Gazetteer of the Mooltan district.

‡ The name is spelt by Hwen Thsang "Po lo fa to." General Cunningham would read "So-lo fa to," which when transliterated would become *Sorovati*, and would be a synonym for *Shorkot*. Ancient Geography of India p. 204.

§ See Gazetteer of the Gujránwála district.

|| See General Cunningham's Ancient Geography of India, pp. 203 to 208, and his Archæological Survey, vol. V., pp. 97 to 103.

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come the Gilotars next to the Sháhpur boundary; then Harals, Sayads and unimportant Jats, until the Jhang tahsíl boundary is again reached, coinciding with that of the Shah Jíwana *iláka*. This tract, the property of the two Sayad families, the descendants of Pír Fatah Khán and Shah Jíwana, extends to the country held by the Siáls in the Vichanh in the south-west, and northwards to the Khokhar villages above. North of the Siál country, bounded by Kot Khán, come the Akeras, a Jat tribe of no historical interest but of considerable present influence. Beyond them, Khokhars, Jats, and Beloches along the river, and Khokhars in the upland villages, are the proprietors as far as the Sháhpur boundary. West of the Jhelam above the Siál country, almost all the villages belong to Beloches.

Preliminary sketch of the modern history of the district.

The history of Jhang is the history of the Siál, and until the reign of Walidád Khán, in the first half of the 18th century, the annals of the district and its tribes are enveloped in Cimmerian darkness. Apparently no facts are forthcoming, for the simple reason that there are none. Passing by the expedition of Alexander and the march of Hephæstus down the left bank of the Jhelam and lower Chenáb, through the country now included in this district, the first tangible facts are gained from Bábar's memoirs. In the year 1504-5 A.D., when Bábar passed through the Khaibar pass and advanced on Pesháwar, he wrote :—" The Government of Bhera, " Khusháb and Chenáb was held by Sayad Alí Khán. He read the " *Khutba* in the name of Iskandar Bahlol, and was subject to him. " Being alarmed at my inroad, he abandoned the town of Bhera, " crossed the river Behat (Vehat is still the local name for the Jhelam) " and made Shirkot (Shorkot ?), a place in the district of Bhera, his " capital. After a year or two, the Afgháns having conceived suspi- " cions against Sayad Alí on my account, he became alarmed at their " hostility, and surrendered his country to Daulat Khán, who was " Governor of Lahore. Daulat Khán gave Bhera to his eldest son " Alí Khán, by whom it was now (1519) held." Alí Khán and his father were governors under the Lodi dynasty of Dehli, then represented by Ibrahím Lodi, the last of his line. Shortly before the above passage, Bábar speaks of the country of Bhera, Khusháb, Chenáb and Chiniot as having been long in the possession of the Turks, and ruled over by the family of Timúr Beg and his adherents and dependants ever since his invasion of India in 1398. The matter of most interest to the historian of Jhang is the locality and limits of these countries. Where was the Chenáb country ? Is the Shirkot where Sayad Alí Khán fled, the Shorkot of to-day ? If so, how could Bábar write of it as being in the district of Bhera, for the Khusháb country must have intervened ? Mr. Steedman is inclined to identify Shirkot with Shorkot, and to place the Chenáb country south of Chiniot and Khusháb. Whether this is right or wrong, Jhang and the Siáls were not of sufficient importance to be mentioned at the commencement of the 16th century A.D. They remained equally unknown and unnoticed during the two centuries that elapsed between Bábar's first invasion and the accession to the throne of Muhammad Sháh in 1720 A.D. It was not until the stirring times during which the dynasty of the Mughals tottered

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and fell, the half century that witnessed the rise of the Sikhs and the Mahrattas, and the devastating inroads of Ahmad Sháh, that the Siáls can be said to have been even temporarily independent. Previous to Walidád's accession, the Siáls probably were a pastoral tribe, but little given to husbandry, dwelling on the banks of the rivers and grazing their cattle during the end of the cold and the first months of the hot weather in the lowlands of the Chenáb, and during the rainy season in the uplands of the Bár. The greater portion of the tract now occupied by them was probably acquired during the stormy century that preceded the conquest of Hindústán by the Mughals. During this period the country was dominated from Bhera and sometimes from Mooltan. The collection of revenue from a nomad population inhabiting the fastnesses of the Bár and the deserts of the Thal could never have been easy, and was probably seldom attempted. Left alone, the Siáls applied themselves successfully to dispossessing those that dwelled in the land,—the Nauls, Bhangús, Mangans, Marals, and other old tribes,—amusing themselves at the same time with a good deal of internal strife and quarrelling, and now and then with stiffer fighting with the Kharals and Beloches. Then for 200 years there was peace in the land, and the Siáls remained quiet subjects of the Lahore Súba, the seats of local government being Chiniot and Shorkot. Walidad Khán died in 1747, one year before Ahmad Sháh Abdálí made his first inroad and was defeated before Dehli. It is not known when he succeeded to the chieftainship, but it was probably early in the century, for a considerable time must have been taken up in the reduction of minor chiefs and the introduction of all the improvements with which Walidád is credited. It was during Walidád's time that the power of the Siáls reached its zenith. The country subject to Walidád extended from Mankera in the Thal eastwards to Kamáha on the Rávi, from the confluence of the Rávi and the Chenáb to the *ilàka* of Pindi Bhattián beyond Chiniot. He was succeeded by his nephew Ináyatulla, who was little if at all inferior to his uncle in administrative and military ability. He was engaged in constant warfare with the Bhangí Sikhs on the north, and the chiefs of Mooltan to the south. His near relations, the Siál chiefs of Rashídpur, gave him constant trouble and annoyance. Once indeed a party of forty troopers raided Jhang and carried off the Khán prisoner. He was a captive for six months. The history of the three succeeding chieftains is that of the growth of the power of the Bhangís and of their formidable rival the Sukarchakia misl, destined to be soon the subjugator of both Bhangís and Siáls. Chiniot was taken in 1803, Jhang in 1806. Ahmad Khán, the last of the Siál Kháns, regained his country shortly after in 1808, but in 1810 he was again captured by the Mahárája, who took him to Lahore and threw him into prison. Thus ended whatever independence the Siál Kháns of Jhang had ever enjoyed.

Early history of the Siál clan up to Walidád Khán's reign.

The previous paragraph contains a brief sketch of the history of the Siáls and their rule over the southern portion of the country now comprised in the Jhang district. It is now necessary to fill in the details so far as they have been ascertained. The sources

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from which the information now given has been compiled, are the history of the Siál by Maulví Núr Muhammad Chela, Griffin's "Punjab Chiefs," and the local stories and traditions. The Siáls are descended from Rái Shankar, a Panwár Rájpút, a resident of Dháránagar between Allahábád and Fatehpur. A branch of the Panwárs had previously emigrated from their native country to Jaunpur, and it was there that Rái Shankar was born. One story has it that Rái Shankar had three sons—Séu, Téu, and Ghéu—from whom have descended the Siáls of Jhang, the Tiwánás of Sháhpur, and the Ghebás of Pindi Gheb. Another tradition states that Siál was the only son of Rái Shankar, and that the ancestors of Tiwánás and Ghebás were only collateral relations of Shankar and Siál. On the death of Rái Shankar we are told that great dissensions arose among the members of the family, and his son Siál emigrated during the reign of Alá-ud-dín Ghorí to the Punjab. It was about this time that many Rájpút families emigrated from the provinces of Hindústán to the Punjab, including the ancestors of the Kharals, Tiwánás, Ghebás, Chaddhars and Panwár Siáls. It was the fashion in those days to be converted to the Muhammadan religion by the eloquent exhortations of the sainted Báwa Faríd of Pákpattan, and accordingly we find that Siál in his wanderings came to Pákpattan, and there renounced the religion of his ancestors. The saint blessed him, and prophesied that his son's seed should reign over the tract between the Jhelam and Chenáb rivers. This prediction was not very accurate. Báwa Faríd died about 1264-65. Siál and his followers appear to have wandered to and fro in the Rachna and Chaj Doábs for some time before they settled down with some degree of permanency on the right bank of the Jhelam. It was during this unsettled period that Siál married one of the women of the country, Sohág, daughter of Bhái Khán Mekan of Sáhiwál in the Sháhpur district, and is also said to have built a fort at Siálkot while a temporary resident there. At their first settlement in this district, the Siáls occupied the tract of country lying between Mankera in the Thal and the river Jhelam, east and west, and from Khusháb on the north to what is now called the Garh Máhárája *ilùka* on the south. Mankera is said to have been founded by Mának, and Amowáni, now called Haidarábád, by Amo, sons of Diráj. The tomb of Chúchak, a leading man of the Kohli branch, is at Kotli Bákir Sháh, and Maggún, the ancestor of the Maghiánás, emigrated to Maghiána from Lohábhir. About the year 1462, Mal Khán, ninth in descent from Siál, founded Jhang Siál on the banks of the Chenáb. The old town of Jhang was situate west of the tomb of Núr Sháh, south-west of the modern town, and was subsequently carried away by the river. There are still some traces of the old town to be seen. Mr. Monckton wrote of Mal Khán:—"He was "the first of a race of rulers who, under the title of Khán, exercised "an extensive sway over the neighbouring countries, till the rising "fortune of the Sikhs, guided by the genius of Ranjít Singh, "successively absorbed all the minor principalities within the "territory of the five rivers." But Mr. Monckton much over-estimated the power and influence of the Siáls before the reign of Walidád

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Khán. At this period the throne of Dehli was occupied by the Lodhís, and this part of the Punjab was included in the governments of Chiniot and Shorkot and Khusháb. There were, however, no resident governors, and the Siáls paid in their revenue to the Nauls, who were the dominant tribe in the country round Jhang. Mal Khán, after the foundation of Jhang, visited Lahore, and obtained the farm of the Jhang revenues from the Governor. Another account is that he met the Governor at Chiniot. Mal Khán belonged to the Chuchkáná branch of the Siáls. He was succeeded by his eldest son, Daulat Khán, who was killed near the Thal while repelling a Beloch raid. His tomb is still to be seen at Wású Astháná. The chieftainship descended to his son Gházi Khán, whose first act was to revenge his father's death and inflict severe punishment on the Beloches. He built a fort on the banks of the Jhelam, a short distance above its junction with the Chenáb, where the village of Chauntra now stands. It is related that Gházi Khán was the first Siál chief who established a standing army. The next prince was Jalál Khán, son of Gházi Khán. He appears to have been deficient in ability as a governor, and unable to restrain his unruly tribesmen. The minor chiefs of Khíwa and Pahárpur now first appear on the scene. Rashídpur was founded by Jalál Khán's son Rashíd, and Pahárpur by Pahár Khán, a nephew of Jalál Khán, who had quarrelled with his uncle, and set up an independent chiefship. Pahár Khán treacherously slew his uncle while on a visit to him, made with the object of effecting a reconciliation. He was succeeded by his son Rashíd Khán, who abdicated in favour of his son Firoz Khán. Firoz Khán's first enterprise was to exact retribution for his grandfather's murder. His brother Kabír Khán collected the youth of Jhang and took by storm the fort of Pahárpur. All the descendants of Pahár Khán who were taken were put to the sword. The remnant that escaped founded the fort of Gilmála, about 15 miles to the south-west of Jhang. After this exploit Kabír Khán and Firoz Khán ruled jointly, and when Firoz Khán died his brother ascended the throne. The next chief was Jahán Khán. The eight sons of Jahán Khán were superseded, and their cousin Gházi Khán obtained the chieftainship. Gházi Khán lost his sight, and abdicated in favour of his son Sultán Muhammad, between whom and the Kharals there was constant hostility. The story told at page 510 of the "Punjab Chiefs" does not agree with the account given by Maulví Núr Muhammad. Prince Maujuddín stopped at Kamália on his way to Mooltan and Dera Gházi Khán. He was at the time leading an expedition to punish some rebellious Beloches. Saádatyár Khán, the Kharal chief, complained to the prince of the conduct of the Siáls and their leader Sultán Mahmúd. The prince ordered Sultán Mahmúd to be thrown into confinement, but deferred enquiry into the charges until his return from the frontier. The nobleman who was deputed to arrest Sultán Mahmúd and take him to Mooltan was so pleased with his manners and address, that he interceded with Maujuddín for him. The prince then sent for Sultán Mahmúd, but Saádatyár Khán, fearing that the true cause of the enmity between himself and the Siál chief would leak out and the

groundless nature of his accusation be exposed, intercepted the messenger and beguiled him into adding to his message the advice that it was Sultán Mahmúd's best policy to make friends with the Kharal and give him his sister in marriage. The Siál was so exasperated at his proposal that he then and there killed the messenger with his fists, and was himself slain in the *melée* that ensued. All this took place at Mooltan, for Sultán Mahmúd's tomb is there. Sultán Mahmúd left no children, and was succeeded by his brother Lál Khán, whose mother was a prostitute. He was taunted by Saádatyár Khán for this taint in his ancestry, and in revenge he plundered up to the walls of Kamália, and ravaged the Kharal country. Lál Khán died childless, and was succeeded by his brother Mahram Khán, of whom nothing is known. He met his death at the hands of a herdsman, who shot him in mistake for a robber, and his son Walidád reigned in his stead.

Early history of the Siál clan up to Walidád Khán's reign.

Walidád Khán was by far the most able chieftain that ever ruled the Siáls. His talent for civil administration was only equalled by his skill and success as a military leader. Under his beneficent rule a rude people first learnt what justice was ; severe punishments and a rigorous enforcement of the track law put a stop to crime ; a moderate assessment of land revenue resulted in an extension of cultivation and the construction of a number of wells that now seems fabulous ; while the kingdom of the Siáls advanced to limits that it never knew before, and has never reached since. When Walidád Khán succeeded his father, the boundaries of his kingdom were most narrow. Within a few miles of Jhang fort to the north lay lands that acknowledged the sway of the Máhní chief of Khíwa. Southwards another and more powerful chief, a Nithráná Siál, with his head-quarters at Mírak Siál, 26 miles from Jhang, ruled over the country from Shorkot to within 12 or 15 miles of Jhang. In the Vichanh was the independent chief of Massan, a Sáhibána Siál, whose territory marched with that of the Bhairo Khokhars to the north, and with the villages of the Sháh Jíwana *ilàka*, subject to the Sayad Latíf Sháh, a descendant of Pír Fatah Khán, on the north-east. Beyond the Sayad came the lands of the Rihán chief of Kálowál. Across the Chenáb Rashídpur was the seat of Siál chiefs, sprung from the same stock as Walidád, and whom he never in the height of his power regarded as other than allies. Eastward the sovereignty of the Bár was disputed by the Kharals, represented by the Kamália chief. The relation in which these chiefs stood to the ruling power in the first quarter of the 18th century is not clear; but this much appears, that they were independent of the Jhang Siáls, and probably paid (or often did not pay) their revenue direct to the governors of Chiniot and Mooltan. As was the custom, as his ancestor Mal Khán had done with the Nauls, so did Walidád Khán with these neighbouring chiefs of Khíwa, Massan, Shorkot, Mírak and Kamália. He first obtained from the Lahore governor the right to collect their revenue or tribute, and his next step was to make them subject to himself. His first object was secured by stratagem. The Dehli empire was fast hastening to its dissolution

Walidád Khán.

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and when the time came for payment of revenue, Walidád pretended to be ill, and delayed payment. At the same time he contrived to have hints conveyed to the neighbouring chiefs that he was a defaulter only because the government of the day was too weak to enforce the collection of its dues. The rival chiefs fell into the snare and refused payment. No sooner had they thus publicly thrown off the yoke than Walidád Khán repaired to Chiniot and paid in his revenue. The Dehli governor complained of the conduct of the other chiefs, and Walidád at once offered to pay up their revenue also, if their countries were made over to him. His offer was accepted. A small force of cavalry was deputed to assist him, and Walidád then sent for the chiefs, who obeyed the summons. They were thrown into prison for a short time, but were subsequently released and granted service *jágírs*. The subjection of these chiefs was followed by the reduction of the Sayad ruler of Rajoa, Latíf Sháh, and of the Khokhars of Márí and Bhairo. An invasion of the Beloches of Sáhiwal in aid of the Khokhars was also repelled with loss by his general, Sharíf Khán Alíáná; Izzat Bakhsh Rían was his deputy in Kálowál. It is not known how Walidád acquired the Kálowál *iláka*, but most probably he obtained it as a portion of the Chiniot province. The governorship of the Chiniot province was next bestowed upon the loyal (for he never professed himself other than the slave of the Dehli empire) and fortunate Siál chief. His supremacy was now acknowledged over the whole of the country included in the district of Jhang as it at present exists, together with large slices of the neighbouring districts of Montgomery and Dera Ismáil Khán. He died in 1747 at Sodra, near Wazírábád, while in attendance on Máhárája Kaurá Mal, the governor of Mooltan.

Ináyatulla Khán.

His successor Ináyatulla Khán was his nephew, and had also married his daughter. This chief was little inferior as an administrator to his uncle, and in military genius was probably more than his equal. He is said to have fought and won 22 battles. He reigned 40 years, from 1747 to 1787. Able as he was, he could not stem the resistless wave of Sikh success, and at his death the Siál ascendancy was clearly on the wane. Amid encroachments of the Bhangí Sardárs from the north, inroads from Mooltan on the south, successive raids by the plundering free-booters that accompanied Ahmad Sháh's invasions, attacks by the Beloches and Tiwánás, and disunion and dissensions among the Siáls themselves, it was no easy matter to steer the ship of Siál rule safely into haven. We have more facts about Ináyatulla Khán's reign than any other. At the commencement he associated his brother-in-law Shahádat Khán with him in the chieftainship. They sat on one throne, sheathed their swords in one scabbard, ate and drank together, and in a word rivalled in their friendship the most renowned examples afforded by antiquity. This fraternal affection did not last long. A quarrel took place. Shahádat Khán left Jhang and withdrew to Kádirpúr. He got an army together there, and marched upon Jhang. After crossing the Chenáb he was met at Sultánpur by Ináyatulla Khán, and was there defeated and slain. Meanwhile an Afghán, named Dín Muhammad, had seized upon Márí beyond

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Kot Isa Sháh, but Ináyatulla, after disposing of Shahádat Khán, marched against the invader and defeated and drove him out of the Jhang territory. The Siáls of Rashídpur had now become powerful, and were noted for their turbulence and bravery. To punish them for some disobedience, Ináyatulla obtained the aid of some Durráni horsemen from the governor of the day, and harried their lands. In return for this, forty horsemen of the Siáls of Rashídpur gave the chief a taste of their quality by taking him prisoner at Jhang, and carrying him off under the eyes of his army to Rashídpur. They kept him in confinement in the castle of Sat in the Thal for some six months. Apparently neither during this nor the previous reign had the rule of the Siáls extended very far down the right bank of the Chenáb, for among Ináyatulla's achievements is reckoned his defeat of the two Sikhs who were the sub-governors of Islámábád and the annexation of their charge. This incensed the Governor of Mooltan, and an ambuscade was laid for Ináyatulla while on a visit to Shorkot. He, however, got word of the plan from the Sargánás of Kund Sargána, and collecting an army of Káthiás and Kamlána, Rajbána, and Sargána Siáls, defeated the Mooltan troops with great slaughter at Kotla Afgháná close by Shorkot. At one time Ináyatulla found it politic to pay Malik Sher Tiwáná black mail as the cheapest way of protecting the outlying *pargana* of Márí. Subsequently, thinking himself strong enough, he discontinued the payment. Sher Khán then assembled his clan, and driving the Siáls out of Kháí, a few miles north of the present district boundary on the right bank of the Jhelam, laid siege to Kot Langar, now Thattí Langar, just inside the present boundary. Here Ináyatulla met and defeated the Tiwáná force. Both sides are said to have had some Sikh chiefs as auxiliaries. At another period the Siál chief defeated and subdued the Beloches of Haidarábád in the Thal. He also took the fort of Uch founded by a Belot Sayad who had settled in the Kachhi during his reign. It was in this reign that the Bhangí Sardárs first made their power felt. About 1760, Harí Singh ravaged Jhang and imposed a tribute. About 1778, Ináyatulla ceased to pay tribute and recaptured Chiniot, but it had apparently again fallen into the hands of the Bhangís before his death. It is related of Ináyatulla that he met Jahán Khán, the grandfather of Dost Muhammad Khán of Kábul, while on his way back from Hindústán, who asked for one of his sisters in marriage. There were three or four unmarried, but the proud Siál sent word to Bhawání Dás, his Díván, to have them all married at once, and declined the proferred alliance on the ground that he had no sisters unmarried.

Ináyatulla Khán's successors.

Ináyatulla died in 1787, and was succeeded by his imbecile son Sultán Mahmúd, whose weakness only served to set off the great force of character possessed by his wife Mussammát Niámat Khátún, the daughter of Shahádat Khán. Mánh Singh, father of Ranjít Singh, nourished designs on Jhang, but the army collected by Mussammát Niámat Khátún was so formidable that he postponed his invasion. Shortly after, Sáhib Khán, half brother of Sultán Mahmúd, who was constantly endeavouring to dethrone

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Sultán Mahmúd, sought assistance from Mánh Singh, and was promised aid; but the promise was not carried out, as Timúr Sháh was advancing on Mooltan. Finally, Sáhib Khán obtained an entry to Jhang by treachery, and with 85 men only at his back, captured the fort and put Niámat Khátún and Bhawání Dás, the Díván, to death. Sultán Mahmúd was absent from Jhang and marched against the usurper, but he was inveigled to a meeting, seized and imprisoned at the fort of Chauntra, and shortly afterwards Sáhib Khán put him to death. Sáhib Khán was himself assassinated at a marriage feast a few months after. Sáhib Khán left a son by a woman of the prostitute class, who died three years after at Uch; his successor was Kabír Khán of the line of Jahán Khán, who married Sáhib Khán's widow, the daughter of Umr Khán Siál. After a peaceful and uneventful rule,—the calm preceding the storm,—he was dethroned by, or abdicated in favour of his son Ahmad Khán, the last of the Sial Kháns. This was in 1801. Kabír Khán fled to Uch, where he was besieged unsuccessfully for two months by Ahmad Khán. When the siege was raised, Kabír Khán fled to Rangpur, where he died. Seven months after the accession of Ahmad Khán, Ranjít Singh laid siege to and took Chiniot, then held by Jassa Singh, the son of Karam Singh Dúlú, a chief of the Bhangí confederacy. It is difficult to glean any clear account of the varying fortunes of Chiniot between the death of Walidád Khán and its capture by Ranjít Singh, but the town seems to have been held almost continuously by the Bhangí Sardárs. After making himself master of Chiniot, Ranjít Singh turned towards Jhang, but Ahmad Khán bought him off by agreeing to pay Rs. 70,000 a year and a mare. The first instalment was sent through Fatah Singh, Káliánwála. Ahmad Khán paid the tribute for two or three years, and then in S. 1862, A.D. 1805-6, the Máhárája again invaded Jhang with a large army. The Siál chief again endeavoured to stop the Sikh advance by a payment of *nazaránà*, but his offers were rejected. Jhang was invested, and after some hard fighting the town and fort were captured. Ahmad Khán fled to Mooltan, where he found an asylum with Muzaffar Khán, who granted him an allowance of Rs. 25 a day. From Jhang the Máhárája crossed the Chenáb and exacted Rs. 3,000 as *nazaránà* from the Sayad ruler of Uch. Thence the Sikh leader turned south and marched on Mooltan, and his progress was only stopped within a short distance of the city by a payment of Rs. 70,000. Jhang, with the exception of the Vichanh, was made over on farm to the Sikh Chief Fatah Singh, Káliánwála, the Vichanh tract being entrusted to Dyál Singh and Fatah Singh Lamah. Fatah Singh appointed Dal Singh as his sub governor. The following year Ahmad Kháh, with the assistance of a Pathán force given him by the Nawáb of Mooltan, made an effort to recover his kingdom. He captured Shorkot, and having established his authority in the southern portion of Jhang, he advanced on the capital, only to retire on the arrival of Fatah Singh with a force. He next crossed the Chenáb and took refuge in the Uch fort, where he was pursued by Fatah Singh. There they came to terms, and Fatah Singh restored what portion of Jhang he held to Ahmad Khán on

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his agreeing to pay an annual rent of Rs. 70,000. Ahmad Khán was reinstated, and shortly after drove out the Sikh governors of the Vichanh. The next ten years were passed in peace and quietness. Ranjít Singh was too fully engaged on other expeditions to give any attention to the affairs of Jhang. In 1810 the Máhárája had made an unsuccessful attack on Mooltan, and on his way back to Lahore he visited his chagrin on Ahmad Khán who had accompanied him as his feudatory, and whom he suspected of favouring the Mooltan Nawáb. He threw him into confinement, and carried him away to Lahore. The government of Jhang was entrusted to Lála Suján Rái. Ahmad Khán's eldest son, Ináyat Khán, fled to Haidarábád in the Thal, where he was followed by Náng Sultán, the Fakír ruler of Uch. Suján Rái then took possession of Uch. Eventually Ahmad Khán was released from prison and granted a *jágír* of Rs. 1,200 at Mírowál, in the Amritsar district, on Ináyat Khán his son being made over to the Máhárája as a hostage. Ahmad Khán died in 1820 on his way back from Mooltan at Ali Khanáná, and was buried at Jhang. His son Ináyat Khán succeeded to his father's allowance and *jágírs*, and was killed in 1838, near Rasúlpur, fighting on the side of Díván Sáwan Mal against Rája Guláb Singh. Ismáil Khán, the younger brother of Ináyat Khán, and the present head of the family, went to Lahore on the death of his brother in the hope of obtaining a grant of succession to his brother's *jágír*. But owing to the machinations of Guláb Singh, the *jágír* was confiscated, and all that he got was an allowance of Rs. 100 a month. He remained at Lahore for five years, and then his pension was discontinued. He then returned to Jhang and lived there in great poverty on an allowance of Rs. 2 or Rs. 3 a day granted him by Díván Sáwan Mal until the Mooltan rebellion and the annexation of the Punjab.

Of his services during the campaign of 1848-49, and again in 1857, Sir Lepel Griffin writes ("Punjab Chiefs," pages 506, 507):—

"In October 1848, Major H. Edwardes wrote to Ismáil Khán directing him to raise troops in behalf of Government, and to collect the revenue of the district. The poor chief, hoping the time was come when loyalty might retrieve his fortunes, raised a force, and descending the river attacked and defeated the rebel Chief Atá Muhammad at Nekokárá. Afterwards, when Sardár Sher Singh Atáriwála had passed through Jhang and had left Deoráj in command of 1,000 men there, Ismáil Khán attacked this detachment several times with varying results. His Jamadár, Pír Kamál of Kot Isa Sháh, captured at the fort of Taraka another rebel chief called Káhan Dás. Thus Ismáil Khán, the representative of a long and illustrious line of chiefs, stood out bravely on the side of Government. His influence, which was great in the district, was all used against the rebels, and his services were specially valuable at a time when it was inexpedient to detach a force against the petty rebel leaders After annexation Ismáil Khán was made Risáldár of the Jhang Mounted Police, but his services were through inadvertence overlooked, and it was not till 1856 that he received a pension of Rs. 600 for life. Three wells were also released to him and his male heirs in perpetuity. In

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1857 the services of the chief were conspicuous. He aided in raising a force of cavalry, and served in person against the insurgents. For his loyalty he received a *khilat* of Rs. 500 and the title of Khán Bahádur, and his yearly grant of Rs. 600 was raised to Rs. 1,000, with the addition of a *jàgìr* of Rs. 350 for life. In 1860 his pension was at his own desire exchanged for a life *jàgìr*. He has recovered many of his old zamíndárí rights in different villages, and although his estate is only held on a life tenure, yet the Government on his death will take care that this illustrious family does not sink into poverty. Kabír Khán, the son of Ismail Khán, is an Honorary Police Officer of the Jhang district; Jahán Khán, brother of Ahmad Khán and uncle of Ismáil Khán, holds a *jàgìr* at Chund Bharwána and Budhi Thatti worth Rs. 887, an old grant of Ranjít Singh to his father, confirmed in perpetuity by the British Government."

Jahán Khán died on 9th November 1870.

The farmers of the Jhang district revenue.

The names of the persons who farmed the revenues of the Jhang province, including Pindi Bhattián, Farúka, and Sayadwála, and excluding Kálowál and Garh Máhárája and Ahmadpur, from Sambat 1873 to 1903, are given below :—

Year.		Name of Farmer.	Contract money.
Sambat.	A. D.		
			Rs.
1873	1816	Sujún Rái	3,75,000
1874	1817	Sukh Diál	4,00,000
1875-76	1818-19	Jowála Singh	4,00,000
1877	1820	Sukh Diál	4,10,000
1878	1821	Sáhib Ditta and Shám Singh ...	4,00,000
1879	1822	Shám Singh, Jowála Dás, Lálá Rám ...	4,20,000
1880	1823	Jassa Singh, Daulat Rám, Shám Singh	3,25,000
1881	1824	Rákar and Jalla Bharwána ...	4,40,000
1882	1825	Shám Singh, Abdul Rahmán ...	4,35,000
1883	1826	Afzal Khán, Jowáhir Singh ...	4,40,000
1884	1827	Jiwand Singh	3,40,000
1885	1828	Máháráj Attar Singh, Bhola Náth ...	4,45,000
1886	1829	Dal Singh, Devi Bakhsh	4,55,000
1887	1830	Dal Singh	4,56,000
1888	1831	Rám Káur of Jhang	4,67,000
1889-1900	1832-44	Díván Sáwan Mal	4,35,000
1901-1903	1845-47	Díván Múl Ráj	4,35,000
1903-4	1847-48	Rallia Rám	5,00,000
1904	1848-49	First Summary Settlement by Mr. Cocks.	

The amount of revenue shown includes the Chabútra tax, and is an approximation on returns furnished by Kánúngos. Too much credit should not be attached to the figures. The Jhang province contained the tract that constituted the old district of Jhang. The Kálowál *ilàka* belonged to Bhera, and those of Garh Máhárája and Ahmadpur to the province of Mooltan. Rája Guláb Singh held the farm of Kálowál for many years, and the severity of his exactions was such that his name is still execrated. Garh Máhárája and Ahmadpur were under Sáwan Mal. The results of Sáwan Mal's rule on the welfare of this district will be discussed with the past fiscal history of the district (Chap. V, Sec. B). For an account of his rise to power, his administration of the Mooltan

province, and his death, pp. 272-285 of the "Punjab Chiefs," should be consulted. There also will be found the history of Múl Ráj's short pro-consulship and his downfall. Some further historical details will be found in the notices of the leading tribes in Chapter III, Section C.

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Annexation.

Before the treaty of Bhairowál, the British Government undertook to maintain the authority of the Lahore Darbár, and to administer the affairs of the Punjab during the minority of the young Máhárája Dalíp Singh. Officers from the Company's service were selected to carry out a summary settlement of the land revenue. The Jhang district, with the exception of the Garh Máhárája and Ahmadpur *ilàkas*, had been occupied in 1846 by the Darbár during the contest between the Lahore Government and Múl Ráj; and when peace was made it was retained, although it had previously formed a portion of the Mooltan province and been held by Sáwan Mal. The two excepted *ilàkas*, however, continue to form a part of the territory held by Múl Ráj. Upon the annexation of the Punjab in 1849 the whole district became British territory. The area comprised within the Jhang district as first constituted is described below.

The Mutiny.

The following account of the events of 1857 is taken from the Punjab Mutiny Report:—

"Jhang is a wild rural district, chiefly in the Bár above described, and tenanted by the wild races, of whom mention has just been made. The population is comparatively scanty. The treasury guard was a Company of the 16th Native Infantry Grenadiers. It was a mere hindrance; and at the request of Captain Hawes, Officiating Deputy Commissioner, was withdrawn to its head-quarters at Lahore, where it was disarmed. Two parties of mutineers were destroyed in this district,—one numbering 10 men of the 14th Native Infantry; the second, the party of the 9th Irregular Cavalry. The villagers rendered good service in tracking this last detachment; but when on the 17th September the Bár tribes rose, the villagers of this district maintained but a doubtful neutrality. Communications between Jhang and Lahore were cut off. For some time great anxiety was felt at Lahore as to what had occurred there. It was known that many of the minor police stations had been rifled, and that the tribes around were all in rebellion. In a few days, however, Captain Hockin's force, 250, of the 17th Irregular Cavalry, was thrown into the disturbed region; it was supported by a party of the Leiah and Gujránwála New Levies, while Major Chamberlain, with a force from Mooltan, advanced on Jhang from the south. Mr. McMahon, Extra Assistant Commissioner, was sent out to Kot Kamália in the Gugera district with a party of police horse; but it had been pillaged before his arrival, and he was soon after recalled by Captain Hawes. Lieutenant Lane, Assistant Commissioner, had command of the Leiah Levy; while Captain Hawes joined Major Chamberlain's force, and remained with it as Civil Officer till the defeat of the rebels at Kamália some time after. After Captain Hawes' return to Jhang, Lieutenant Lane was detached to Shorkot, where he did excellent service in apprehending rebels and seizing their cattle."

The first tahsíl divisions and *taalukahs*.

The old fiscal divisions of the Sikhs were to a certain extent retained within the tahsíl boundaries. The old tahsíls were three besides the Peshkári of Uch. Chiniot was much the same as

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The first tahsíl divisions and *taalukahs.*

it is now, *minus* the villages that came over from Sháhpur. Tahsíl Jhang lay on the left bank of the Chenáb, and included the country from the Chiniot boundary down to the Rávi, and also the lowest portion of the Vichanh known as the Massan *taalukah.* West of the Chenáb was the Peshkári of Uch, bounded by the Garh Máhárája *iláka* on the south, and extending up to the right bank of the Jhelam to a few miles beyond Máchhiwál. The Kádirpur tahsíl contained the remaining country on the right bank of the Jhelam, and between the Jhelam from the Massan *taalukah* to the Sháhpur boundary. The sub-divisions into *taalukahs* were as follows in the old tahsíls :—

Chiniot.	*Jhang.*	*Kádirpur.*	*Uch.*
Sipra.	Wára.	Márí.	Chauntra.
Chiniot.	Jhang.	Kot Shákir.	Uch.
Kurk.	Gilmála.	Kot Isa Sháh.	Nekokára.
Bhowána.	Shorkot.	Kádirpur.	
Kálowál.	Massan.	Bharmi Wárá.	
Ahmadnagar.		Sháh Jíwana.	
Lálián.		Bhattián.	

Subsequent changes of boundary.

At first the Jhang district, compared with the present boundaries, contained the Farúka *taalukah* in the Chaj Doáb, transferred to Sháhpur in 1854, and a considerable strip of country on the right bank of the Rávi, between the present boundary and that river, transferred to the Mooltan district about the same time; and did not contain the Garh Máhárája and Ahmadpur *ilákas* transferred from Muzaffargarh in 1861, and the Kálowál *iláka* transferred from Sháhpur in the same year. The existing division of the district into the three tahsíls of Shorkot, Jhang and Chiniot dates from this period. In 1880 five villages on the Rávi were transferred from Shorkot to the Sarai Siddhu tahsíl of Mooltan in order to give the Deputy Commissioner of the latter district complete control of the Rávi *sailáb.*

List of District officers.

The following is a list of the Deputy Commissioners who have held charge of the district since annexation :—

LIST OF DEPUTY COMMISSIONERS FROM ANNEXATION.

From	To	Names.
May, 1849 ...	February, 1850 ...	G. W. Hamilton.
March, 1850 ...	February, 1851 ...	J. Clarke.
March, 1852 ...	January, 1853 ...	G. W. Hamilton.
February, 1853 ...	March, 1853 ...	J. W. Bristow.
April, 1853 ...	January, 1857 ...	H. Monckton.
February, 1857 ...	March, 1858 ...	H. S. Hawes.
April, 1858 ...	December, 1858 ...	C. P Elliot.
January, 1859 ...	April, 1859 ...	W. G. Davies.
May, 1859 ...	July, 1859 ...	A. Levien.
August, 1859 ...	May, 1861 ...	W. E. Blyth.
June, 1861 ...	August, 1861 ...	F. Macnaughten.
September, 1861 ...	October, 1862 ...	W. B. Jones.
November, 1862 ...	December, 1862 ...	W. M. Lane.
January, 1863 ...	March, 1863 ...	W. E. Blyth.
April, 1863 ...	March, 1864 ...	H. D. Dwyer.
April, 1864 ...	April, 1866 ...	W. M. Lane.
May, 1866 ...	17th May, 1870 ...	R. J. D. Ferris.
18th May, 1870 ...	25th August, 1873 ...	G. E. Wakefield.
26th August, 1873 ...	21st September, 1875...	T. W. Tolbort.

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List of District officers.

From	To	Names.
22nd September, 1875 ...	2nd December, 1875 ...	A. Harcourt.
3rd December, 1875 ...	1st March, 1876 ...	T. W. Tolbort.
2nd March, 1876 ...	20th January, 1878 ...	A. Harcourt.
21st January, 1878 ...	7th March, 1880 ...	G. M. Ogilvie.
8th March, 1880 ...	13th January, 1882 ...	R. Bartholomew.
14th January, 1882 ...	8th May, 1882 ...	M. Macauliffe.
9th May, 1882 ...	To date ...	R. Bartholomew.

Development since annexation.

Some conception of the development of the district since it came into our hands may be gathered from Table No. II, which gives some of the leading statistics for five-yearly periods, so far as they are available ; while most of the other tables appended to this work give comparative figures for the last few years. In the case of Table No. II, it is probable that the figures are not always strictly comparable, their basis not being the same in all cases from one period to another. But the figures may be accepted as showing in general terms the nature and extent of the advance made.

The following figures show the revenue of the district under certain heads in 1851, 1861, 1871 and 1881 :—

IMPERIAL REVENUE, 1851-52, 1861-62, 1871-72, 1881-82.

Year.	Land Revenue.		Salt and Customs.	Excise (spirits).	Opium and drugs.	Assessed Taxes.	Stamps.	Miscellaneous.
	Proper.	Fluctuating.						
	Rs.	Rs.		Rs.	Rs.	Rs.	Rs.	Rs.
1851-52 ..	2,40,635	11,418	..	852	465	..	11,271	2,443
1861-62 ..	3,10,402	27,668	..	2,021	1,223	..	26,485	..
1871-72 ..	2,69,650	1,50,520	..	3,360	2,467	13,916	29,177	..
1881-82 ..	3,14,668	1,29,805	..	3,150	2,818	..	56,031	.

CHAPTER III.

THE PEOPLE.

SECTION A.—STATISTICAL.

Chapter III, A.

Statistical.

Distribution of population.

Table No. V gives separate statistics for each tahsíl and for the whole district, of the distribution of population over towns and villages, over area, and among houses and families ; while the number of houses in each town is shown in Table No. XLIII. The statistics for the district as a whole give the following figures. Further information will be found in Chapter II of the Census Report of 1881 :—

Percentage of total population who live in villages	Persons	90·64
	Males	91·02
	Females	90·20
Average rural population per village		474
Average total population per village and town		519
Number of villages per 100 square miles		13
Average distance from village to village, in miles		2·98
Density of population per square mile of	Total area — Total population ...	69
	Total area — Rural population ...	63
	Cultivated area — Total population ...	615
	Cultivated area — Rural population ...	557
	Culturable area — Total population ...	86
	Culturable area — Rural population...	78
Number of resident families per occupied house	Villages...	1·22
	Towns ...	1·94
Number of persons per occupied house	Villages...	5·74
	Towns ...	8·05
Number of persons per resident family	Villages...	4·71
	Towns ...	4·14

As has already been stated, more than three-fifths of the whole district consists of arid steppes scantily inhabited by nomad pastoral tribes, and almost wholly deserted at certain seasons of the year ; and as most of this area has been returned as culturable, the figures for density of population, both upon total and upon culturable area, are in a manner misleading.

Migration and birth-place of population.

Table No. VI shows the principal districts and States with which the district has exchanged population, the number of migrants in each direction, and the distribution of immigrants by tahsíls. Further details will be found in Table No. XI and in supplementary Tables C to H of the Census Report for 1881, while the whole subject is discussed at length in Part II of Chapter III of the same report. The total gain and loss to the district by migration is shown in the margin. The total number of residents born out of the district is 18,989, of whom 10,381 are males and 8,608 females. The number of people born in the district and living

Proportion per mille of total population.

	Gain.	Loss.
Persons ..	48	91
Males ..	49	101
Females ..	48	78

Chapter III, A.

Statistical.

Migration and birth-place of population.

in other parts of the Punjab is 35,688, of whom 21,628 are males and 14,060 females. The figures below show the general distribution of the population by birth-place :—

Born in	Proportion per mille of Resident Population.								
	Rural Population.			*Urban Population.*			*Total Population.*		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
The district ..	954	954	954	932	952	939	952	952	953
The province ..	999	1,000	999	983	996	991	997	999	997
India ..	1,000	1,000	1,000	995	999	997	999	1,000	998
Asia ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	999

The following remarks on the migration to and from the Jhang district are taken from the Census Report of 1881 :—

"Jhang is a singularly backward district. Though population is sparse, much of the area consists of arid plains without irrigation of any sort, and the population is really dense in proportion to the cultivated area. Consequently it gives population to every district in the list except Gujránwála, and the emigrants are nearly twice as numerous as the immigrants. The emigration is particularly large to Sháhpur, Montgomery, Muzaffargarh, and Mooltan, four neighbouring districts in which canal irrigation has greatly developed of late years. The immigration probably consists to a great extent of people who have left the steppes of the neighbouring districts for the valleys of the two rivers which run through the district, and the moderate proportion of males would seem to show that the migration is permanent; though with the nomad tribes of the *bár* who travel with their families, the test is perhaps of less value than elsewhere, and it is not impossible that many of the immigrants are graziers with their herds who have come to pasture in the Jhang steppes. On the other hand, the former explanation is supported by the fact that the Mooltan *bár*, the only one which is separated from Jhang by a river, has sent hardly any immigrants."

Increase & decrease of population.

The figures in the statement below show the population of the district as it stood at the three enumerations of 1855, 1868 and 1881 :—

	Census.	Persons.	Males.	Females.	Density per square mile.
Actuals.	1855 ..	251,769	139,149	112,620	44
	1868 ..	347,043	193,053	153,990	61
	1881 ..	395,296	214,382	180,914	69
Percentages.	1868 on 1855 ..	137·8	138·7	136·7	139
	1881 on 1868 ..	113·9	111·0	117·5	114

The figures of 1868 are corrected for transfer of territory; but the district as it stood in 1855 did not include the tracts transferred from Sháhpur and Muzaffargarh in 1861. The population of these tracts by the Census of 1855 is said to have been 47,285, which raises the population with which comparison must be made to 299,062, and reduces the percentage of increase

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Statistical.

Increase & decrease of population.

between 1855 and 1868 to 13·8, or precisely the same as that between 1868 and 1881. So again the density of population per square mile in 1855 would be 52·35, instead of 44.

It will be seen that the annual increase of population per 10,000 since 1868 has been 81 for males, 125 for females, and 101 for persons, at which rate the male population would be doubled in 85·9 years, the female in 55·9 years, and the total population in 69·2 years. Supposing the same rate of increase to hold good for the next ten years, the population for each year would be, in hundreds :—

Year.	Persons	Males.	Females.	Year.	Persons.	Males.	Females.
1881	395,3	214,4	180,9	1887	419,8	225,0	194,9
1882	399,3	216,1	183,2	1888	424,0	226,8	197,3
1883	403,3	217,9	185,5	1889	428,3	228,7	199,8
1884	407,4	219,6	187,8	1890	432,6	230,5	202,3
1885	411,5	221,4	190,1	1891	436,9	232,4	204,8
1886	415,6	223,2	192,5				

There seems to be no reason why the rate of increase should not be sustained. Part of the apparent increase is probably due to increased accuracy of enumeration, a good test of which is afforded by the percentage of males to persons, which was 55·26 in 1855, 55·54 in 1868, and 54·23 in 1881. But, as already shown at page 41, the district has, during the lifetime of the present generation, lost much population by migration to neighbouring districts consequent upon the extension of canal irrigation in them, notwithstanding which the extraordinary healthiness of these plains of small rain-fall has enabled the people to increase their numbers more rapidly than in most of the Punjab districts. The urban population has actually decreased since 1868, the numbers living in 1881 for every 100 living in 1868 being 96 only. This is partly due to alteration in the boundaries of the Jhang-Maghiána Municipality, 71 small hamlets having been excluded between 1868 and 1881. The population of individual towns at the respective enumerations are shown under their several headings in Chapter VI.

Tahsil.	Total population		Percentage of population of 1881 on that of 1868
	1868.	1881.	
Jhang ..	151,822	171,719	113
Chiniot ..	109,427	128,241	117
Shorkot ..	85,794	95,342	111
Total district ..	347,043	395,296	114

Within the district the increase of population since 1868 for the various tahsíls is shown in the margin. Changes of boundary make it impossible to compare the figures for 1855 by tahsíls.

Births and deaths.

Table No. XI shows the total number of births and deaths registered in the district for the five years from 1877 to 1881, and the births for 1880 and 1881, the only two years during which births have been recorded in rural districts. The distribution of the total deaths and of the deaths from fever for these five years over the twelve months of the year is shown in Tables Nos. XIA and XIB. The annual birth-rates per mille, calculated on the population of 1868, were as shown in the margin. The figures

	1880.	1881.
Males .	17	19
Females	14	16
Persons ..	31	35

Chapter III, A.

Statistical.

Births and deaths.

below show the annual death-rates per mille since 1868, calculated on the population of that year :—

	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	Average.
Males	9	16	18	13	17	18	15	18	16	13	12	13	19	18	15
Females	8	16	17	13	18	18	14	18	16	12	12	12	18	19	15
Persons	9	16	18	13	17	18	14	18	16	13	12	13	19	18	15

The registration is still imperfect, though it is yearly improving; but the figures always fall short of the fact, and the fluctuations probably correspond, allowing for a regular increase due to improved registration, fairly closely with the actual fluctuations in the births and deaths. The historical retrospect which forms the first part of Chapter III of the Census Report of 1881, and especially the annual chronicle from 1849 to 1881, which will be found at page 56 of that report, throw some light on the fluctuations. Such further details as to birth and death-rates in individual towns as are available will be found in Table No. XLIV, and under the headings of the several towns in Chapter VI.

Age.

The figures for age, sex, and civil condition are given in great details in Tables Nos. IV to VII of the Census Report of 1881, while the numbers of the sexes for each religion will be found in Table No. VII, appended to the present work. The age statistics must be taken subject to limitations which will be found fully discussed in Chapter VII of the Census Report. Their value rapidly diminishes as the numbers dealt with become smaller; and it is unnecessary here to give actual figures, or any statistics for tahsíls. The following figures show the distribution by age of every 10,000 of the population according to the Census figures :—

	0—1	1—2	2—3	3—4	4—5	0—5	5—10	10—15	15—20
Persons ..	377	228	325	356	370	1,656	1,609	1,018	695
Males ..	359	216	307	336	356	1,574	1,600	1,065	708
Females ..	398	242	347	379	386	1,752	1,620	963	678

	20—25	25—30	30—35	35—40	40—45	45—50	50—55	55—60	Over 60.
Persons ..	684	723	791	443	659	303	516	138	764
Males ..	642	682	767	447	646	323	556	155	835
Female ..	733	771	821	438	676	279	469	118	680

On the subject of age, the Deputy Commissioner wrote as follows in his District Report on the Census of 1881:—

"I do not think much reliance can be placed on the ages recorded. The large mass of the population is quite incapable of estimating age. A zamíndár's ideas are limited to childhood, youth, manhood, and old age. The figures in most instances only record the result of the combined judgment of the zamíndár and the enumerator. Men evidently about 30 years of age often in court state themselves to be 12 or 15 years old. As soon as their beards turn grey, they go to the other extreme and make themselves out much older than they are. I have found that grey-beards

Chapter III, A. — Statistical.

always exaggerate their age. The proportion of young children seems very high, and leads me to suppose that the ages of children have been generally understated."

Sex.

The number of males among every 10,000 of both sexes is shown in the margin. The decrease since 1868 is almost certainly due to greater accuracy of enumeration. In the Census of 1881, the number of females per 1,000 males in the earlier years of life was found to be as follows:—

Population.		Villages.	Towns.	Total.
All religions	1855...	...	...	5,526
	1868...	...	...	5,564
	1881...	5,446	5,203	5,423
Hindús	...1881...	5,413	5,149	5,347
Sikhs	...1881...	5,728	...	5,735
Musalmáns	...1881...	5,449	5,229	5,435

Year of life.	All religions.	Hindús.	Musalmáns
0—1	938	849	956
1—2	946	940	948
2—3	954	941	960
3—4	953	...	...
4—5	914	...	...

Civil condition.

The figures for civil condition are given in Table No. X, which shows the actual number of single, married, and widowed for each sex in each religion, and also the distribution by civil condition of the total number of each sex in each age-period. The Deputy Commissioner thus discussed the figures in his Census Report:—

"The number of single persons exceeds that of married by 38 per cent. Calculated on the whole population, the proportion of single, married and widows is as follows:—

Single	53 per cent.
Married	39 ,,
Widows and widowers	8 ,,

"The large proportion of single persons is chiefly among the rural classes, and is accounted for by the fact that the agricultural classes of this district do not marry their children till they are full grown and fit for a grown man's work. A man is usually 25 and a woman 20 before marriage takes place. Indeed, there are examples of women not being married till they are rather advanced in years and reach the age of 35 or more. The custom prevails both among Hindús and Muhammadans. The case with the townspeople is, however, quite different. The Hindús especially marry their children at a very early age, and would expose themselves to the censure of their family and brotherhood if they did not do so, especially with regard to girls. Ordinarily a child among the Hindús is married or bethrothed as soon as small-pox is over. The Muhammadans are rather indifferent, but nevertheless do not keep their children unmarried for a long time. Married males and married females are 49 and 51 per cent. respectively. The surplus of females is accounted for by the fact that both Hindús and Muhammadans in some cases marry more than one wife. Of widowers and widows taken together, the widowers and widows are 31 and 69 per cent. respectively. The large surplus in widows is attributed to the fact that by custom and religion Hindú widows cannot remarry. This custom, originally Hindú and almost unknown in Muhammadan countries, has spread to the

upper class of Muhammadans to some extent. But among the zamíndárs a widow is treated as a chattel, and remarried to the nearest of kin of her deceased husband.

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Statistical.

Polyandry and polygamy.

"Polyandry is unknown in this district. Polygamy is practised by both Muhammadans and Hindús, though to a smaller extent by the latter. Muhammadan law allows four wives at a time. Rich zamíndárs in this district marry as many as three or even four, and persons even in poor circumstances do not uncommonly marry a second wife. Thus there are not a few *pàolìs* (weavers), dyers (*rangrez*), blacksmiths, *chùrigars* (bangle-makers) in Jhang and Maghiána who have two wives. Rich Hindús marry another wife mostly when the existing wife is barren. A poor Hindú, though childless, seldom marries a second wife.

Infanticide.

"Infanticide is unknown in this district. The population is for the most part Muhammadan, who, as already pointed out, do not marry their daughters at an early age, and have therefore no pressing demand for money to make provision for marriage expenses. But the excess of males over females, I think, points to the conclusion that often female children are less carefully nurtured, and that the mortality among them is therefore greater. The increase of females since 1868 seems to show that daughters are now more carefully nurtured.* They are not actually ill-treated, but their birth is often considered a misfortune; and it is easy to understand that neglect, without actual ill-usage, increases the death-rate."

Infirmities.

Table No. XII shows the number of insane, blind, deaf-mutes, and lepers in the district in each religion. The proportions per 10,000 of either sex for each of these infirmities are shown in the margin. Tables Nos. XIV to XVII of the Census Report for 1881 give further details of the age and religion of the infirm. In the district Census Report for 1881, the Civil Surgeon wrote as follows on the subject:—

Infirmity.	Males.	Females.
Insane ..	15	9
Blind ..	58	71
Deaf and dumb	16	10
Leprous ..	2	..

"A large proportion of the blind as seen in this district have lost their sight from old neglected inflammation, or inverted eyelashes. Some have lost it during an attack of small-pox, and some from cataract. Technically speaking, the largest proportion of the blind are seen with opacities of the cornea or entire disorganization of the eyeball, next to it with glaucoma and amaurisis, and next with cataract. Women are more blind than men. More women are seen suffering from inverted eyelashes and consequent opacity of cornea than men. Generally this is the first stage in the progress towards total blindness. Smoke and heat of the kitchen has most probably something to do with the greater proportion of blindness in the women. Deaf and dumb and lunatics are more common in the Chiniot tahsíl than in the other sub-divisions, amongst Muhammadans than amongst Hindús and Sikhs, and in towns than in villages. I am unable to give any explanation of these facts; but I may mention here that the Chiniot tahsíl is (especially the town and some villages towards the north-east, as well as some villages of the Sháhpur district in that direction) remarkable for the prevalence of goitre."

* The increase is partly due to increased accuracy of enumeration.—EDITOR.

Chapter III, B.

Social and religious life.

The climate of Jhang is described at pages 12 and 13. The excessive dryness of the climate, sanitation and the sparseness of the population counteract entirely the evil sanatory habits of the population. Manure heaps and filthy hollows are close to every village, and there is an entire absence of any conservancy arrangements. These evils, which in a worse climate would lead to the outbreak and spread of serious diseases, in Jhang only succeed in slightly injuring the general health at particular seasons. Cholera is almost unknown.

European and Eurasian population.

The figures given below show the composition of the Christian population, and the respective numbers who returned their birthplace and their language as European. They are taken from Tables Nos. IIIA, IX and XI of the Census Report for 1881 :—

	Details.	Males.	Females.	Persons.
Races of Christian population.	Europeans and Americans ...	8	2	10
	Eurasians	1	...	1
	Native Christians ...	...	...	...
	Total Christians ...	9	2	11
Language.	English	7	3	10
	Other European languages ...	...	...	...
	Total European languages...	7	3	10
Birth-place.	British Isles ...	7	1	8
	Other European countries ...	...	...	...
	Total European countries...	7	1	8

But the figures for the races of Christians, which are discussed in Part VII of Chapter IV of the Census Report, are very untrustworthy; and it is certain that many who were really Eurasians returned themselves as Europeans.

SECTION B.—SOCIAL AND RELIGIOUS LIFE.

Villages and houses.

It is only in the Chiniot tahsíl and the better cultivated portions of the other tahsíls that all the inhabitants of a village live at one hamlet or village. They prefer living at their separate wells. Down south there are many villages that have no village site whatever. Each proprietor lives at his well. The well of the lambardár, and perhaps one other, will have a small hamlet growing up round it, consisting of the huts of the proprietors and his tenants and those of a shop-keeper and a few Kamíns. There are hardly any strong solidly-built villages such as are seen further east. There are four kinds of houses:—

(1). *Kothi* or *Kothri*, a square mud house, containing sometimes one and sometimes two rooms, sometimes with a front room *piráh*, and sometimes without; the roof is also of mud, and flat.

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Social and religious life.

Villages and houses.

(2). *Sáhl*, the commonest kind, consists of four mud walls, over which a roof of thatch is thrown, supported on an arrangement of beams and rafters that keeps the centre of the thatch highest, and allows the sides to bend down and overlap the side mud walls. The end walls are built up to meet the thatch. The thatch is made of *sar* grass strengthened by *káná bands*, and is often in one piece. The thatch is called *chhappar*, and the beams which support it, *pat* and *lara*. A new *sáhl*, with the floor sanded and sprinkled with fresh water, is cool and comfortable.

(3). *Kurhá* is a cabin of thatch or screens. There are several modes of arranging them. One of the simplest is to take a piece of thatch and prop it up by three sticks, one in the centre and one in the middle of each end. The sides of the thatch fall down on either side to the ground. The one open end is blocked up by a screen, and the other serves as the doorway.

(4). *Pakhí* is simply a moveable roof of *tálí*. It is most used by graziers in the Bár. It is propped up by four or five poles, and under it the family lives. There are no walls to it of any description.

Nomad camps.

Besides the villages proper, there are *jhoks*, *ráhnás*, and *bhainís*. *Jhok* is the name generally applied to the head-quarters of camel-owners, and *ráhna* to that of cattle graziers. A *ráhna* is the name applied to all the temporary abodes of large collections of graziers in the Bár. *Bhaíni* is another name applied to the head-quarters of a herd.

Household furniture.

Among the appendices to Mr. Steedman's Settlement Report will be found a comprehensive list of all the household furniture used by zamíndárs. What a man uses depends entirely upon the position he holds or thinks that he ought to hold. It is a well-established fact that zamíndárs use very much more expensive articles than they did 20 or 25 years ago. Formerly all their utensils were of earthenware, except a few indispensable metal articles. Now a well-to-do zamíndár has almost everything in metal. English crockery and glass tumblers are also coming in fashion.

Men's dress.

The poor zamíndár's clothes are a white cloth tied round his loins, and reaching petticoat-like half way below the knee, called *majhla*; and another white cloth thrown over his shoulders, called *chaddar*. Another piece of thin cloth, *pag*, is twisted round his head, leaving the top bare, and, with a pair of shoes, completes his attire. In the cold weather he wears in addition a blanket, *kamal*. In Chiniot even the better zamíndárs, zaildárs, and such like, do not wear anything more, not even a *kurta*. Southwards almost every lambardár wears a *kurta* in addition to the *chaddar* and *majhla*. Some of the *lungís* worn in this district are of extremely pretty check patterns, the ground being generally white. White is the proper colour for the turban. In the Chiniot tahsíl the zamíndárs who are connected with the Bár are fond of wearing a turban of dark cloth with a check pattern, or only stripes of red or yellow running through it. This is very short in length, and is twisted and worn in two or three folds round the head. It gives a marauding look to the wearer. Only a few men in the district

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Social and religious life.

Women's dress.

affect a European style in their costume, and they are properly disliked by their neighbours.

The women of the poor zamíndár class wear the *majhla*, always white in colour, tied in a slightly different way from the men. It is worn longer and tighter, especially about the hips. Trousers, *pàijàmàs*, are tabooed. Certain classes of women in the towns wear them, but not a single zamíndár woman. A boddice *(choli)* and a *chaddar* worn over the head are the other garments. The *choli* is usually brightly coloured. The *chaddar* is either white or of some dark sombre colour. Young unmarried women sometimes wear bright coloured *chaddars*, but this is seldom the case. As with the men so with the women, there is considerable variety in the quality of the clothes worn by individuals of different positions. Increased prosperity has led to increased expenditure. The above description refers to the ordinary clothes worn by zamíndárs only. The Hindús, men and women, belonging to the towns are but little engaged in agriculture, and dress very differently.

Ornaments.

The wearing of ornaments is almost entirely confined to the women. A man is contented with his signet, *chhàp*, and perhaps one other ring *chhalla*, and an amulet, *bahatta*, also ornamental, tied just above the elbow. As for women's ornaments, their name is legion. Those worn by almost every zamíndárni are *kangan*, a plain bracelet; *válián*, earrings; *chhalla*, a plain finger ring; *hassi*, a necklet; *bahatta*, an amulet, similar to those worn by men. Nose rings are very seldom worn.

Food.

The food of the nomad population of the Bár is very different from that of the agricultural residents of villages near the rivers. It is estimated that a resident of the Bár consumes only one-third the quantity of food grain eaten by the ordinary cultivator, and Mr. Steedman's opinion is that the proportion is still smaller. One is constantly told that sometimes the grazier for days goes without any food other than milk and substances made from milk. Milk is, it may be almost said, the staple food of the district. The ordinary grazier as often as not, instead of making bread for his evening meal, simply mixes his flour in the milk and warms it over a fire. In the morning he has a draught of buttermilk, and later on a small *chapáti*, and another drink of buttermilk. Milk is usually drunk with the evening meal. The table below gives the food of an agriculturist for the different months :—

Months.	Food.
Chet	*Chapàtis* of barley, peas, and wheat flour. Buttermilk with morning and milk with evening meal. Green gram pods and carrots are also eaten.
Baisákh	Wheat *chapàtis*, and vegetables.
Jeth	Wheat *chapàtis*, *pìlù* berries, melons, vegetables, buttermilk, and milk as before.
Hár, Sáwan, Badrú, Assú ...	Wheaten *chapàtis*, melons in Hár, buttermilk and milk as before.
Katik, Maghar, Poh, Mágh, Phágan	Wheat, *jowàr*, *bàjrà*, and maize *chapàtis*. Turnips cooked in milk. Buttermilk and milk as before.

Chapter III, B.

Social and religious life.

Food.

Zamíndárs have two meals a day, the morning meal from 10 to 11 o'clock, the evening one from 6-30 to 8 at night. The evening meal is taken later in the cold weather than in the hot. The morning meal remains at much the same time all the year round. When the *pílú* berries are in, only half the ordinary quantity of grain is eaten. When turnips are ready, one-fourth of the usual amount of bread. Well-to-do zamíndárs live upon wheaten bread, rice, and flesh. The Siáls are much given to liquor.

The average annual consumption of food grains by a family of five persons, two of whom are children, was estimated for the Famine Report at 30 maunds in the villages, and 33 maunds in the towns. The details for the villages are as shown in the margin. For a family in the town, add to the above 6½ maunds of wheat and half a maund more of *dál* and miscellaneous grain, and cut out the *chína*.

	Seers.
Wheat	480
Gram	200
Jowár	120
Chína	160
Barley	120
Dál of sorts and other grain	120
Total ...	1,200

Modes of reckoning time.

The first month in the year is Chetar and the last Phágan. They are given in order below, with corresponding English months. The spelling gives the local pronunciation :—

Chetar	middle of	March	to middle of	April.
Visákh	,,	April	,,	May
Jeth	,,	May	,,	June.
Hár	,,	June	,,	July.
Sáwan	,,	July	,,	August.
Badrú	,,	August	,,	September.
Assú	,,	September	,,	October.
Katch	,,	October	,,	November.
Maghar	,,	November	,,	December.
Poh	,,	December	,,	January.
Mágh	,,	January	,,	February.
Phágan	,,	February	,,	March.

The days are divided into eight *pahrs* (pronounced *pahur*) of 3 hours each. The following are recognised times of day :—

As used by		English equivalent.
Muhammadans.	Hindús.	
Adhí rát	Adhí rát	Midnight.
Pichhlí rát	Pichhlí rát ...	3 A. M.
Dhammi welá ...	None	The last hour of the night before dawn.
Namáz welá	Parbhát welá ...	Daybreak.
Deh Ubhre	Vaddo welá ...	Sunrise.
Chha welá	None	Two hours or an hour-and-a-half after sunrise.
Roti welá	Do.	Bread time, 9-10 A. M.
Dopahr	Do.	Midday.
Peshín	Do.	3 P. M.
Lureshín	Vaddí Peshín ...	4 P. M.
Nadveshín	None	5 P. M.
Dígar	Do.	Half an hour before sunset.
Namáshán	Sandhián welá ...	Just after sunset.
Khuftán	Sotá welá ...	Bed-time, when all the stars have come out.
Sotá welá	Pahr rát ...	An hour after bed-time, 9-11 P. M.

Chapter III, B.

Social and religious life.

Religion.

Table No. VII shows the numbers in each tahsíl and in the whole district who follow each religion, as ascertained in the Census of 1881, and Table No. XLIII gives similar figures for towns. Tables Nos. III, IIIA, IIIB of the Report of that Census give further details on the subject. The distribution of every 10,000 of the population by religions is shown in the margin. The limitations subject to which these figures must be taken, and especially the rule followed in the classification of Hindús, are fully discussed in Part I, Chapter IV of the Census Report. The distribution of every 1,000 of the Musalmán population by sect is shown in the margin. Shíahs are unusually numerous in Jhang, a fact due to the influence of the Shíah Kuraishís of Shorkot and Hassú Balel, and of the Sayads of Uch who are connected with the famous Sayad family of Belot in Dera Ismáil Khán. They are of the most bigoted type. They observe the *Muharram* most strictly, abstaining from all luxuries for the first ten days of the month, and on the 10th they accompany the *Táziahs* bare-headed and bare-footed. They throw dust on their heads and beat their breasts with extreme violence, and allow neither Hindú nor Muhammadan to approach the *Táziah* without baring his head and removing his shoes.

Religion.	Rural population.	Urban population.	Total population.
Hindú .	1,357	4,397	1,642
Sikh .	79	175	88
Musalmán	8,564	5,425	8,270

Sect.	Rural population.	Total population.
Sunnís	962·6	963·6
Shíahs	37·2	36·2
Others and unspecified .. .	0·2	0·2

Table No. IX shows the religion of the major castes and tribes of the district, and therefore the distribution by caste of the great majority of the followers of each religion. A brief description of the great religions of the Punjab and of their principal sects will be found in Chapter IV of the Census Report. The religious practice and belief of the district present no special peculiarities; and it would be out of place to enter here into any disquisition on the general question. The general distribution of religions by tahsíls can be gathered from the figures of Table No. VII; and regarding the population as a whole, no more detailed information as to locality is available. But the landowning classes and the village menials are almost wholly Musalmán, the Hindú and Sikh religions being practically confined to the mercantile classes and their priests. The Deputy Commissioner wrote as follows in the Census Report of 1881:—

"The Pirohats or Hindú priests are to the whole Hindú population as 1 to 133·3, the Muhammadan priests to the Muhammadan population as 1 to 14,285. The Hindú priests residing in the district are not the sole pastors of their people. Large numbers from Gujránwála, Lahore and Amritsar pay periodical visits to their disciples. In the same way the greater number of the Muhammadan population are the followers of the Makhdúms of Bahawal Hak in Mooltan, or worship at Hujra Shah Mukím and Pák Pattan, the seat of the patron saint of

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Religion.

the Siáls, Báwa Faríd. The Makhdúms of Mooltan exercise very great influence over the Muhammadan population of the district. When a Makhdúm comes to pay his periodical visits to Jhang, hundreds are seen flocking around him and paying him homage. But the district is not without its own Makhdúms, who have followers in this district as well as the neighbouring districts of Dera Ismáil Khán, Dera Ghází Khán, Mooltan and Montgomery. The family of Makhdúm Karm Husain and the Uch Sayads are very much revered by the people."

A considerable number of fairs are held in this district during the year. A list of the more important is given below :—

Place where fair is held.	Person in whose honour it is held.	Date.
1. Shah Jiwana .	Shah Jiwana	27th Baisakh.
2. Pirkot Sadhana ..	Pir Abdul Kadir ..	...
3. Athara Hazara .	Pir Tajuddin .	3rd Friday in Chet.
4. Pir Abdul Rahman .	Pir Abdul Rahman .	3rd Thursday in Chetar.
5. Kakki Kathia .	Pir Kalia .	...
6. Bhamrala	Haji Kasim Bali ..	9th Zalhaj.
7. Hassu Balel .	Shah Balol ..	27th Har.
8. Mari ..	Shah Sakhira ..	10th Har.
9. Rodu Sultan .	Fakir Gul Muhammad .	7th Katik.
10. Jhang	Hir and Ranja ..	1st Magh.
11. Sadik Nihang .	Shah Sadik Nihang ..	Maghar.
12. Massan .	Jinda Kalana ..	Dasehra.
13. Bulla Patowana .	Mian Lal Kanju ..	12th Baisakh.
14. Kirana ..	Sidh Nath .	Chetar.

Language.

Table No. VIII shows the numbers who speak each of the principal languages current in the district separately for each tahsíl and for the whole district. More detailed information will be found in Table No. IX of the Census Report for 1881, while in Chapter V of the same report the several languages are briefly discussed. The figures in the margin give the distribution of every 10,000 of the population by language, omitting small figures. Many of the people shown as speaking Punjabi might more properly have been returned as speaking Jatki, the language or dialect of the south-western plains of the Punjab. There are several dialects in the district. West of the Jhelam a dialect resembling that of residents of the Thal is used. South of Shorkot a *patois* resembling that of Mooltan is spoken. The Chiniot zamíndárs from the north of the tahsíl have quite a different accent from those further south. The *patois* of the Bár is the most uncouth of all. Among the appendices to Mr. Steedman's Report will be found a list of proverbs and sayings, and also a collection of songs, which will serve to give some slight insight into the language spoken by the people.

Language.	Proportion per 10,000 of population.
Hindustáni	8
Bágri	1
Punjabi	9,981
Jatki	2
Pashto	7
All Indian languages ..	9,999
Non-Indian languages ...	1

Character and disposition of the people.

The character and disposition of the people is thus described by Mr. Steedman:—

"The people of the Jhang district are a well built, handsome, sturdy race. The Siáls especially furnish many very fine, stalwart men. In their intercourse with European district officers they are frank and open. They betray no signs of timidity or cringing. Many of the

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Character and disposition of the people.

older men are often outspoken to the extent of rudeness, but they never mean to be insolent. They are by no means devoid of humour. A good deal of somewhat coarse raillery goes on. A joke or an appositely quoted proverb is much enjoyed. They are very proud of the assistance that they gave us in 1848-49, and again ten years later. A more loyally-disposed set of people I do not think exists in the Punjab. After three years' constant intercourse I find I can reckon among the more influential many friends whom I shall leave with sorrow, and always be glad to meet again. The Káthiás and the Siáls in the Shorkot tahsíl are all extremely fond of sport, and word sent round a few days before will bring together all the villagers in the neighbourhood to drive pig. The Chiniot zamíndárs have much less go in them than those of Shorkot. The Vichanh zamíndárs may be put in the same class. Hospitality is practised by many, but most are inclined to exaggerate what they do in this way. I have noticed that those who most frequently din into one's ears the expense they are put to in entertainment are at heart the least liberal of all. The leading zamíndárs of Shorkot are generally men of large property, and they have hitherto been spending considerable sums in drink and licentiousness. In Jhang and Chiniot there are very few zamíndárs who drink. The district generally does not bear the best of characters for morality. The Siál tribe is the greatest sinner. There is a difficulty in disposing of the Siál maidens in wedlock, and delayed marriages are accompanied by the same results here as elsewhere."

Tables Nos. XL, XLI and XLII give statistics of crime; while Table No. XXXV shows the consumption of liquors and narcotic stimulants.

Education.

Table No. XIII gives statistics of education, as ascertained at the Census of 1881, for each religion and for the total population of each tahsíl. The figures for female education are probably very imperfect indeed. The figures in the margin show the number educated among every 10,000 of each sex according to Census returns. Statistics regarding the attendance at Government and aided schools will be found in Table No. XXXVII. The distribution of the scholars at these schools by religion and the occupations of their fathers, as it stood in 1881-82, is shown in the margin.

	Education.	Rural population.	Total population.
Males.	Under instruction ...	115	170
	Can read and write	542	672
Females.	Under instruction ...	4·2	7·0
	Can read and write	5·2	6·5

Details.	Boys.	Girls.
Europeans and Eurasians	...	...
Native Christians ...	1	...
Hindús ...	1,131	146
Musalmáns ...	811	104
Sikhs ...	69	13
Others ...	...	...
Children of agriculturists	782	...
,, of non-agriculturists	325	...

NOTE.—The last two lines refer to village schools only.

Besides these schools there were in 1882 no fewer than 121 *Maktabs* or Muhammadan indigenous schools, with 1,011 scholars and 41 *Pátsháláis* or Hindú indigenous schools with 601 scholars in the district. The Khatrís and Arorás

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Education.

among Hindús and the Khojáhs and Siáls among Musalmáns chiefly avail themselves of the means of education ; the agriculturalists make but little use of them. The Deputy Commissioner wrote as follows in his Census Report of 1881 :—" It must not be "forgotten that of the persons shown as 'able to read and write' "not less than nine-tenths are petty shop-keepers who can write "accounts in their books and nothing more." The number of boys that attend school is but a small percentage of the total population. The number of agriculturists returned as scholars appears to be open to suspicion when compared with the relative numbers of Hindús and Muhammadans. As a general rule, Hindús are not agriculturists. They may be small landowners, but their trade or calling is not agriculture.

Crime.

The pet crime of the district is cattle-lifting. There were 921 non-bailable offences reported during 1879, of which 501, or 55 per cent., were cattle theft Another favourite offence is running off with another man's wife. Wives are looked upon by ordinary zamíndárs as chattels, things for which a certain sum has been paid, and for which a certain sum may be realised. If his wife elopes, the zamíndár suffers injury to his property. His morals are not much offended, nor his self-respect. If he discovers where she is, he does not scruple to take her back, but he insists upon compensation for the loss of her services, and the certain amount of deterioration If his demands are satisfied, he returns home as if nothing had happened. Cattle-lifting is a pastime to the denizens of the Bár. They do not see anything wrong in it. Any family that owns a herd is constantly losing and gaining animals by theft. The police are seldom called in ; the sufferer must be very hopeless when he has recourse to this last resort. What takes place when a man loses an animal, is this. If by following up the tracks the beast is run down among other cattle, or after many days' search the thief is discovered, there are two modes of procedure. The one is an amicable arrangement The owner of the stolen property discovers himself. The thief admits his claims, and satisfies him by making over other cattle worth considerably more than the stolen ones. The rightful owner is also treated with the greatest consideration until the matter is arranged. The stolen cattle are never given back. To do so might prove inconvenient in the future. The other procedure is different The stolen property is often discovered in the possession of a family or tribe of influence, or living in a part of the country where the owner is not known, and where he does not think it advisable to seize the cattle or claim them. Instances are known where a claim having been made, the tables have been turned upon the claimant with serious results. He is seized, and a report is made at the nearest *thàna* that he was caught just outside the homestead walking off with two cows, and when the Thánádár comes he will find the cows and captured one's tracks, and as much evidence as he needs After finding stolen cattle one plan is to send word off to the *thàna* that your stolen cattle have been found. The Thánádár comes, and an arrangement is effected that benefits all alike. There are no arrests. The Thanádár is squared. The complainant discovers that he has made a mistake,

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Crime.

and that the cattle are not really his. The accused makes the complainant a handsome present, and he departs. Another plan, and the one perhaps most generally adopted, is to lurk about the homestead where the stolen cattle are, and carry off at night an equal number to those that were lost. So long as the Bár people prey upon themselves, not much harm is done, but when they raid the cattle and plough bullocks of agriculturists in settled villages, they cannot be punished too severely. It is a fact that several villages lying near the Bár have been at times quite crippled from the loss of their plough oxen. The youth of the Bár show off their prowess by lifting the finest animals they hear of. Stolen property in Jhang slang is known as *ràt jam*, "born of the night." Several lines (*rassa*) for forwarding stolen cattle run from this district to Mooltan, Montgomery, Gujranwála and Sháhpur. To forward cattle is *rassa lenà*. Except pure agriculturists the men of this district are born trackers. In tracking, three or four men join. Each has a cudgel about five feet long. As each foot-print is found, two lines are drawn on the ground before and behind the track, if the tracks are not very clear. Where the tracking is easy, only one line will be drawn, and the trackers follow up the tracks walking at full speed. If the tracking is difficult, one man remains at the last found track, and the others make casts in all directions. Most wonderful feats in tracking are accomplished in this and similarly situated districts. Evidence as to tracking is too often thrown aside as incredible.

Poverty or wealth of the people.

It is impossible to form any satisfactory estimate of the wealth of the commercial and industrial classes. The figures in the margin show the working of the income tax for the only three years for which details are available; and Table No. XXXIV gives statistics for the license tax for each year since its imposition. The income tax returns for 1870-71 show a total of 1,734 persons enjoying incomes above Rs. 500 per annum. In the following year, 950 are returned as having incomes above Rs. 750. The distribution of licenses granted and fees collected in 1880-81 and 1881-82 between towns of over, and villages of under 5,000 souls, is shown in the margin. But the numbers affected by these taxes are small. It may be said generally that a very large proportion of the artisans in the towns are extremely poor, while their fellows in the villages are scarcely less dependent upon the nature of the harvest than are the agriculturists themselves, their fees often taking the

Assessment		1869 70	1870 71	1871 72
Class I	Number taxed	759	944	441
	Amount of tax	7,734	18,408	3,903
Class II	Number taxed	133	330	382
	Amount of tax	2,734	8,910	5,456
Class III	Number taxed	24	295	126
	Amount of tax	931	9,165	3,940
Class IV	Number taxed		126	1
	Amount of tax		6,804	115
Class V	Number taxed		99	
	Amount of tax		9,332	
Total	Number taxed	916	1,734	950
	Amount of tax	11,449	52,619	13,414

	1880 81		1881 82	
	Towns	Villages	Towns	Villages
Number of licenses	366	857	339	988
Amount of fees	4,975	13,470	4,580	15,270

form of a fixed share of the produce; while even where this is not the case, the demand for their products necessarily varies with the prosperity of their customers. Perhaps the leather-workers should be excepted, as they derive considerable gains from the hides of the cattle which die in a year of drought. The circumstances of the agriculture classes are discussed below at the end of Section D of this Chapter.

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Tribes, castes and leading families.

SECTION C.—TRIBES, CASTES AND LEADING FAMILIES.

Statistics and local distribution of tribes and castes.

Table No. IX gives the figures for the principal castes and tribes of the district, with details of sex and religion, while Table No. IXA shows the number of some of the less important castes. It would be out of place to attempt a description of each. Many of them are found all over the Punjab, and most of them in many other districts, and their representatives in Jhang are distinguished by few local peculiarities. Some of the leading tribes, and especially such families as are important as landowners or by position and influence, are briefly noticed in the following pages; and each caste will be found described in Chapter VI of the Census Report for 1881. But in these western districts tribe is a far more important element than caste, the latter being little more than a tradition of origin, a Siál often hardly knowing that he is a Rájpút. The Census statistics of caste were not compiled for tahsíls, at least in their final form. It was found that an enormous number of mere clans or sub-divisions had been returned as castes in the schedules, and the classification of these figures under the main heads shown in the caste tables was made for districts only. Thus no statistics showing the local distribution of the tribes and castes are available. But the general distribution of the more important landowning tribes has been broadly described at pages 26, 27, followed by an outline of the history of their colonisation of the district.

Amount of land held in proprietary right and cultivated by each tribe.

A tabular statement is given on the next page, indicating the amount of land held by each tribe in proprietary right and the amount of land cultivated by each tribe. Jats and Siáls own nearly half the cultivated area between them, and cultivate nearly two-thirds. Besides the two tribes above mentioned, Hindús and Sayads alone hold more than 10 per cent. of the cultivated area. Siáls hold but little property in Chiniot, but are strong in the two other tahsíls. Chaddhars are located almost entirely in Chiniot, and so also are the Bhattís. There are no Beloch proprietors in Chiniot. Two-thirds of their property is situate in the Jhang tahsíl. Sayads are large proprietors in Jhang and Chiniot. Much land is held by Jats in all three tahsíls; but most in Chiniot, least in Jhang. Miscellaneous Muhammadans are strongest in Chiniot, and Hindús in Jhang. The above areas are Settlement figures, and the classification is tribal; while the Census figures of Table No. IX are arranged by caste, and not by tribe. Some tribal details will be found in the following pages.

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Tribes, castes and leading families.

Amount of land held in proprietary right and cultivated by each tribe.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Tahsil.	DETAIL.	Siál.	Chaddhar.	Káthia.	Kharal.	Bhatti.	Rihán.	Beloch.	Pathán.	Sayad.	Kuraishi.	Jat.	Kamins.	Miscellaneous Muhammadans.	Hindús.	TOTAL.
CHINIOT.	No. of proprietary holdings	59	1,706	...	144	392	146	.	...	2,675	...	7,572	295	2,018	710	15,717
	,, cultivating ,, ...	170	1,950	..	151	651	112	...	..	814	...	8,005	1,489	1,596	779	15,717
	Acres owned ...	256	14,180	..	830	7,574	1,340	..	..	18.425	...	38,682	584	12,914	4,341	99,126
	,, cultivated ...	1,075	11,698	..	838	4,491	906	...	...	4,205	...	52,792	8,016	10,432	4,673	99,126
JHANG.	No. of proprietary holdings	7,835	...	..	...	140		2,734	44	2,269	380	4,704	206	981	3,749	23,042
	,, cultivating ,, ...	7,177	...	..	...	136	..	2,194	60	814	256	8,128	1,669	1,294	1,314	23,042
	Acres owned ...	40,949	...	.	..	1,742	..	16,363	357	17,352	2,900	27,803	926	5,198	22,501	136,091
	,, cultivated ...	36,197	..	...	...	1,226	..	12,10[illegible]	378	5,299	1,724	50,574	12,451	6,474	9,662	136,091
SHORKOT.	No. of proprietary holdings	3,945	194	295	...	...	.	855	96	651	1,101	1,690	132	605	1,568	11,132
	,, cultivating ,, ...	3,042	127	147	...	...	..	820	91	357	386	3,486	1,229	444	1,003	11,132
	Acres owned ...	37,664	1,421	3,168	...	...	..	8,033	604	5,067	10,139	12,491	493	5,291	12,711	97,082
	,, cultivated ...	26,659	1,251	1,404	...	...	..	7,137	584	2,606	3,850	31,734	10,430	4,024	7,403	97,082
TOTAL OF DISTRICT.	No. of proprietary holdings	11,839	1,900	295	144	532	146	3,589	140	5,595	1,481	13,966	633	3,604	6,227	49,891
	,, cultivating ,, ...	10,389	2,077	147	151	787	112	3,014	151	1,985	642	19,619	4,387	3,334	3,096	49,891
	Acres owned ...	78,869	15,601	3,168	830	9,316	1,340	24,396	961	40,844	13,039	78,976	2,003	23,403	39,553	3,32,299
	,, cultivated ...	63,941	12,949	1,404	838	5,717	906	19,243	962	12,110	5,574	135,100	30,897	20,930	21,738	3,32,299

Chapter III, C.

Tribes, castes and leading families.

The Jats.

The meaning of the word Jat is exceedingly indefinite in the Jhang district. Mr. Steedman, criticising the classification of the Census of 1868, in which the mass of the population was classed as "Miscellaneous Muhammadans," writes as follows:—

"The Rájpút, Sayad and Beloch tribes excluded, the cultivating and proprietary body consists almost entirely of a vast number of agricultural tribes, each known by a different name, but comprehended within the one universal term Jat. Ethnologically I am not sure of my ground; but if these tribes are not Jats, who are they? They are all converted Hindús. Of this there is no doubt, and all are engaged in agriculture or cattle-grazing. Some of them are recognised as Jats; and in appearance, customs and traditions they do not differ from their unrecognised brethren. For statistical purposes it would be surely a much more useful and convenient arrangement to class these agriculturists as Jats, though they are not true Jats, whatever they may be, but only ploughmen and cattle-graziers."

The principal divisions of the Jats of Jhang, as returned in 1881, are shown below. The figures are rough approximations. The several tribes are described in the following pages:—

SUB DIVISIONS OF JATS

Name.	Number.	Name.	Number.	Name.	Number.
Awán	559	Gordal	649	Panwár	284
Ithwál	338	Gil	298	Janjúá	366
Bhatti	2,874	Khokhar	5,040	Joyá	1,533
Bhutta	1,612	Kharal	673	Dhúdhi	1,578
Thahim .	640	Langa	341	Khichi	483
Siál	437	Hinjra	482	Hiráj	847
Sapra	5,185	Chaddhar	3,255		

Note—Many of these tribes are returned among Rajputs also.

The Rájpúts.

The great mass of the Rájpút population of Jhang consists of tribes of local importance, such as the Siáls, who are known more commonly by the name of their tribe than by that of their caste. Approximate figures for some of the most important as returned at the Census of 1881 are shown below. The several tribes are noticed in the following paragraphs.

SUB DIVISIONS OF RAJPUTS.

Name.	Number.	Name.	Number.	Name.	Number
Bhatti	17,392	Dhúdhi	1,090	Khokhar	6,605
Bhutta	3,231	Siál	36,374	Wattú	246
Panwár	490	Kharal .	2,054	Hiráj	345
Janjúá	1,078	Khichi	983	Chaddhar .	13,390
Joyá	670	Gondal	868	Páolí .	1,244

Note.—Many of these tribes are returned among Jats also.

The Nauls.

The Nauls, as has been mentioned before, occupied the lowlands fringing the Chenáb around the site of Jhang before the

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Tribes, castes and leading families.

The Nauls.

Siáls. Nothing trustworthy is known about their origin, but their traditions carry their family back to one Dhan, a Rája of Bíkanír, who left his native country and settled at old Jhang. At that time the country was under a dynasty of Brahmin kings. Naul, the ancestor of the Naul tribe, was a son of Dhan. The Siáls for some time after their first arrival were subject to the Nauls and paid tribute through them, but they appear to have always been refractory and rebellious dependants. The Nauls were reduced by the Siáls under the leadership of Mal Khán Chuchkána. The Naul leader was then Todir. They now hold several villages near Jhang and in the Kachhi. Sujáwal is a *zaildár* and their headman. He lives at Pakkewála, about three miles from Jhang on the road to Sháhpur. The Nauls prefer cattle-breeding to agriculture, and cattle-lifting to either.

The Bhangús and Mírak Siáls.

The Bhangús are another aboriginal tribe, whose origin is lost in the depths of antiquity, which is another way of saying that they are too stupid or too careless to connect themselves by a fictitious ancestry with some Rájpút Rája or a Muhammadan Emperor. They can give no account whatever about themselves. They were rulers over the Shorkot country before their displacement by the Siáls. Mírak, who founded the chieftainship of Mírak, was a Nithrána Siál, a descendant of Nithar, brother of Mal Khán, the founder of Jhang. He was Díván to the Bhangú ruler, but rose in insurrection against his master, and managed to make himself master of the country. The seat of government was previously Shorkot, but he founded Mírak Siál six miles north, built a fort, and ruled the country from there. At Walidád Khán's reigns, Sultán Bálá, the 4th or 5th in descent from Mírak, was the chief, and was reduced to submission by Walidád Khán. The male line is now extinct. Two female descendants still live in poverty at Mírak, and with them the line ends. The village and fort of Mírak are situate on a promontory of high ground between the lowlands of the present Chenáb valley and a wide depression in which the river flowed long ago, and embosomed in a fine grove of date palms in one of the most picturesque spots in the district.

The Rajoá Sayads.

The Sayads of Rajoá were virtually an independent clan until the reduction of the country by Ranjít Singh. They were once defeated and subdued by Walidád Khán, but he restored the country to them immediately afterwards out of respect for their holy origin. The Rajoá Sayads have always been noted as a brave, manly, military clan, and their independence was probably as much due to their quality as warriors as to the sacred character of their family. They are a branch of the Bukhárí Sayads, the principal Sayad family in this district. Their ancestor was Sháh Daulat, a Sayad *fakír*, who came from Uch Sayad Jalál in Baháwalpur, and settled in this part of the Punjab. He remained for twelve years in the river Chenáb opposite the village of Thattí Bálá Rája, rapt in religious meditation. The Chenáb contains numerous islands, and it is probable that the *fakír*, though said to have lived in the Chenáb, used at times to rest himself on dry ground. The next stage in his career was the performance of

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Tribes, castes and leading families.

The Rajoá Sayads.

many wondrous miracles, and he then left the river and settled at Rajoá where he died, and where his tomb is still to be seen. The fame of the *fakír* and miracles that he did reached the ears of the emperors of Dehli, and the great Akbar granted him by *sanad* all the tract round Rajoá, now comprised in the Rajoá estates. He married a Khokhar's daughter. The power and influence of the family steadily increased. The Sayads were never defeated before they suffered a reverse at the hands of Walidád. The story tells us that they stole Walidád's camels, and that Walidád punished them for not restoring them. The Sayads rendered good service in the Mooltan campaign, and were engaged in much sharp fighting with Naráin Singh round Chiniot, in which they lost several men. They were fully rewarded by the British Government. The present heads of the family are Haidar Sháh and Bahádar Sháh, between whom a bitter enmity exists. Fatah Daryá, who holds more than three-fourths of the Rajoá property, is a *zaildár*, and lives at Kot Amír Sháh. The Sayads, with the exception of Bahádar Sháh, are a thriftless, extravagant, careless lot of men, and excessively embarrassed by debt. Bahádar Sháh is rather economical, and has saved money.

The Latífpur Sayad, descendants of Pír Fatah Khán.

Another independent chief of Sayad extraction ruled in what is now known as the Sháh Jíwana *iláka*. This Sayad family is not the same as that of Sháh Jíwana, though their villages adjoin. The family at some period before the reign of Walidád ruled over a large tract of country. Their only important chief was Latíf Sháh, who was a Sayad of Uch Sayad Jalál in Baháwalpur. He first settled at Alipur on the Chenáb, and thence migrated to Bhambrálá, where he founded a small State. The boundaries of the Sayad's rule were the Chenáb and the countries of the chiefs of Massan and Bhairo on the south and west, and Kirána and the Ríhán country on the east. Latíf Sháh, proprietor and lambardár of village Latíf Sháh, is a descendant of his namesake. The family are now well-to-do zamíndárs.

The Khokhars.

The Khokhars of Nadhágarh and Bhairo were an influential clan in the early days of Jhang history. Besides the two villages above mentioned, the tribe owns many others close by, in the north of the district near Kot Isá Sháh. The Khokhars* derive their descent from Kutab, a descendant of Ali, the son-in-law of the prophet. They apparently came from Arabia in the train of the first Muhammadan invaders. Nadhágarh was founded by one Saláh Khán. The tribe became independent at the breaking up of the Mughal empire. The limits of the Khokhar supremacy were—to the west the Jhelam, to the south Kot Khán and Katiánwáli, to the east the country of the Sayad chief Sháh Latíf, to the north that of the Beloches of Sáhiwál. The Khokhars were in a state of chronic warfare with the Beloches, and Walidád took advantage of a Beloch victory to subdue them and annex their country. Subsequently they revolted, and, aided by their old enemies, the Beloches, gave battle to Walidád's lieutenant, an Aliáná Siál, by name Sharíf Khán. Sharíf Khán defeated the

* The Khokhars are, Mr. Steedman believes, a branch of Rájpúts. The above information has been taken from the Sháhpur Settlement Report.

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insurgents, and was given the lands of Kot Khán in *jágír*, where Kotla Sharífá exists to this day. The Khokhars are among the best of the Jhang zamíndárs. They are hardworking, thrifty agriculturists, not given to crime. The lambardárs of Bhairo and Laú are their chief men.

The Siáls of Massan.

The chief of Massan was a Siál who ruled over the Vichanh. The town of that name was founded by Rái Massan of the Sáhibána branch of the Siáls. Nothing is known of the family except that Walidád subdued them. There are now no representatives of any standing.

The Sayads of Uch.

The Sayads of Uch are the last of the clans of Jhang who can be said to have ever been semi-independent. The family is of recent date. Their founder was a Bilot Sayad, Gul Imám, who wandered across the Thal from his native village on the Indus in the time of Ináyatulla Khán. He first settled at Rodú Sultán, a village in the Kachhi, where another *fakír* of that name had his abode. This *fakír* became his disciple. The Bilot *fakír* then took up his residence on one of the high sandhills of the Thal called Sammú-bhir, and commenced to work miracles. In a few years he had obtained so much influence in the neighbourhood that he commenced to construct the Uch fort. Ináyatulla is said to have assisted and to have worked as a bricklayer. He certainly held the *fakír* in great esteem. as he made over to him a number of villages in *jágír*. Gul Imám seems to have been a man of much ability and large ideas. Besides the three castles in Uch called Chándná, Hazára and Soní, he built forts at Sihda Daulúána, Máchhíwál, and Sat. The ruins of the six forts built on the edge of the Thal remain still, and attest the enterprise of the *fakír*. They must have been places of much strength in the 18th century. The most important of Gul Imám's public works was the construction of the Uch canal, leaving the river Jhelam close under Machhíwal and tailing off in Uch. The canal was one of those big ditches that are so extremely useful. Most of the water was monopolised by the *fakír* for irrigating Uch, though the excavation was effected by the forced labour of all the country through which it passed. The canal ceased to run about the end of the 18th century, after flowing for some sixty years. Zamíndárs are inveterate praisers of the days gone by, and love to dilate upon the wondrous prosperity of Uch when irrigated by the canal, how there was a lake under the gates of the fort and town (that are built on the edge of Thal), on which the *fakír* and his councillors took their pleasure in a boat, how the trees flourished, and how every well had its two or three acres of rice. Verily the glory is departed from Uch. A tumble-down fort uninhabited and in ruins, encircled by a straggling poverty-stricken village, looks down upon a strip of country on whose barren soils, tainted by salts and hard as iron, the only spontaneous growths are a few *jál* bushes. The few wells are of the most wretched description, the worst in the Kachhi. The few episodes in which the Uch Sayads have played any historical part have been already mentioned in the account of the Siál chiefs. The semi-independence of the Sayads lasted as long as that of the Siáls, and succumbed to the advance of Ranjít

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Singh. The head of the family is now a boy of 15 or 16 years old. The family has gone down in the world. They hold a *jàgìr* worth some Rs. 800, but the property has been shamelessly squandered, and the income of the family estates now hardly suffices to pay the interest on the family debts. An attempt is now being made to extricate the Fakír Sáhib, as he is always called, from his money difficulties.

The Ríháns.

The Ríháns were in old days the rulers of the Kálowál *ilàka*, and Izzat Bakhsh was Walidád's governor, but Kálowal only formed a portion of the Siál kingdom for a very short period, and not much interest attaches to the family. Yárá is the head of the family, a lambardár of several villages, and overwhelmed with debt. There are only three Ríhán villages in the district.

The various leading Siál families.

It is necessary now to return to the Siáls, whose origin and history have already been fully related at pages 27 to 36, and to give some account of the principal branches of the tribe. The different families and clans of the Siáls are countless. The royal family is the Jalál Khánána. Among the others the more important are the Rajbána, Bharwána, Kamlána, Chuchkána, Máhni, Sargána, Sarbána, Janjiána, Ali Khánána, Diráj, Chela, Perowána, Sajoke, Sahjar, Fakír Siál, Daulatána, Umrána, Khánúwána, Daduwána, Jabowána, Hasnána, Liwána, and Lakhnána families. It is fairly safe to assume that any tribe whose name ends in *àna* is of Siál extraction.

The Rajbánás.

The Rajbána family is one of the most important, both in point of numbers and in men of note. The Rajbánás are located in Shorkot. Mad and Badh Rajbána, Garh Máhárája, Ranjít Kot, Ahmadpur, many small villages around Kundal Khokhar, and others under the Thal, all belong to them. The family supplies many leading men,—Nusrat of Ahmadpur, Núr of Ranjít Kot, Varyám of Garh Máhárája, Dád of Badh Rajbána, all *zaildárs*, Kásim and Ahmad, lambardárs of Mad, &c. The tribe is descended from Bhopti, third son of Kohli, whose descendant in the 10th generation, Rajjab, gave his name to the tribe. They were originally settled at Almán in the Kachhi. Rajjab died at the time of Lál Khán Siál. His tomb is at Wású Astána. The Rajbánás then moved southwards, and settled in the northern portion of the tract which they now hold. The clan seems to have been a turbulent one. Fighting went on continually between them and the Beloches, Traggars, Mirálís and others. The Beloches were driven away from the Chenáb, and the Rajbánás extended their possessions as far as Ahmadpur. This village originally belonged to a tribe of But Jats. The tribe next commenced to raid into the territory of the Jhang Khán, Ináyatulla ; but subsequently aided him in his contest with the Mooltan Nawáb, and Garh Máhárája (built by Máhárája Kaura Mal) was granted to them. Kásim now became the tribal leader, and in return for assistance, Sultán Mahmúd, the Jhang chief, granted him the Garh Máhárája *ilàka* in *jàgìr*. He was succeeded by Rajjab, the most able of all the Rajbánás. His first success was the repulse of an expedition sent against him by Sáhib Khán. He built several forts, among others the one still in existence at

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The Rajbánás.

Garh Máhárája. Among Rajjab's other deeds are mentioned his co-operation with Khán Beg, Khán Tiwána, and others in an expedition against his brother Khán Muhammad Tiwáná. He shook off the authority of Muzaffar Khán, the Nawáb of Mooltan, and was defeated by him about 1811. It was at Rajjab's instigation that Ahmad Khán, the Jhang chief, was seized and imprisoned by Ranjít Singh on his way back from Mooltan. Rajjab lived in retirement on a liberal *jágír* during his old age, Garh Máhárája and the adjoining villages being under a Sikh Kárdár. His son Khán Beg rendered important assistance to Sir Herbert Edwardes in the Mooltan campaign. Khán Beg died a few years ago, and his son Varyám is now the head of the family. He holds a small pension, half of what his father held.

The Bharwánás.

The Bharwánás trace their descent to Bhairo, sixth in descent from Máhni. They were first settled in the Kachhi, somewhere to the north of Kot Maldeo. The Saliáná Bharwánás were the most powerful branch, and were, as a rule, hostile to the ruling Kháns of Jhang. At the time of Walidád the Bharwánás resided chiefly in the interior of the Bár. Apparently they did not reside in the Kachhi for any length of time. Their settlements nearer the river were at Dhúín Muhammad and Káim Bharwáná. Walidád, among other acts, put the leader of the Bharwánás, Bákaf, in prison. At that time the head-quarters of the Bharwánás were at Rahna Jallúwána in the Bár to the east of Jhang. Walidád attacked this village, but was defeated by the Bharwánás, aided by the Káthiás. Then the victorious tribes fell out among themselves about cattle-grazing, and the Káthiás were driven off to the south by the Bharwánás. This clan never seems to have been happy unless it was fighting with some tribe or other. Raids and reprisals between the Bharwánás on the one side and the Fatiáná and Tahráná Siáls on the Rávi and the Kharals on the other, were of daily occurrence. In the Bár, east of Roránwáli, and also to the north, there are some masonry dome-roofed buildings, evidently of considerable antiquity, that mark the place where Rind Beloches fell in battle with the Bharwánás. According to local tradition, these memorials date from the time when the Bharwánás first came across the Chenáb. The Sándal Bár was then occupied by the Rind Beloches, who supported themselves by camel-breeding. The advent of the Bharwánás was followed by quarrels about grazing rights. Hostilities broke out, but the Bharwánás were the stronger, and drove the Beloches out of the Bár. There are some few Beloches even now in the Bár, but they are dependents of the Bharwánás. The two principal settlements of the Bharwánás are at Mukhiáná, Satiána and Sultánpur north of Jhang, and at Káim Bharwáná, and the adjoining villages to the south. The headmen are Mamand and Ináyat, both well-known characters, to the north, and Núr Muhammad and Muhammad to the south. The Bharwánás are bad agriculturists, and prefer a pastoral life to following the plough and sitting behind the well bullocks. They are inclined to be extravagant like most other Siáls, and a few of them are considerably in debt. Jalla was a Bharwáná of note during the time of Sáwan Mal, and a personal friend of the Díván's. The

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Bharwánás practised infanticide to a large extent in old days. The custom is said to date from the tragic adventures of Sáhiba and Mirzá. The Bharwánás took their wives from the daughters of the Siprás, who curiously are found associated with the Bharwánás in almost all their villages. In some cases they are full proprietors, in other only *taraddadkárs*, and sometimes merely tenants-at-will.

The Kamlánás.

The Kamlánás are an important Siál clan in the Shorkot tahsíl. Their head-quarters are at Jalálpur Kamláná. Kamál, 12th in descent from Bharmí, had three sons, from whom are descended the Sargánás, the Perowánás and the Kamlánás. The Kamlánás at first were residents in the country now occupied by the villages of Májhi Sultán and Cháyánwála, and the intervening tract. They were driven out by the Bharwánás and retreated southwards to Jalálpur, where they are still located. A Kamláná graveyard is still to be seen at Májhi Sultán. The leading men now are Sujáwal the *zaildár*, and Hashmat his enemy.

The Chúchkánás.

The Chúchkánás are the descendants of Chúchak, who was the Siál chief next before Mal Khán, his nephew, who founded Jhang. They are now located on either side of the Chenáb north of Jhang. The chief villages are Kuriánwála on the left, and Pipalwála on the right bank. Murád, the *zaildár*, lives at Thatta Mahla, and is their leader.

The Máhnía.

The Máhni clan has now almost died out. In former days they were independent, and the head-quarters of their chief was at Khíwa. Máhni was the son of Siál. Khíwa was founded by the leader, who gave it his name, a descendant from Siál in the 12th generation. Local tradition states the Chenáb was then flowing east of Khíwa, but this is evidently wrong. The Chenáb did no doubt once flow under the high bank of the Bár, about 16 miles south-east of Khíwa, but this must have been ages before. When Khíwa was founded, the country to the north was held by Marals and Chaddhars. At first the Máhnís remained on good terms with their neighbours; but as they increased in strength, they began to drive them back. Khánúwána was founded in their lands to the north of Khíwa. The first chief of Khíwa really deserving the name was Sáhib Khán. The rule of the Khíwa chief in his high and palmy days extended from Bhowáná to Chautála. The independence of the Máhnís was extinguished by Walidád. From that time the clan appears to have rapidly declined in influence and numbers. There are now no Máhnís in Khíwa. The lands of the village were granted by Sáwan Mal to Bákar, a leading man among the Bharwánás, whose family now holds it. Popular tradition attributes the decay of the Máhni clan to the curse of a *fakír* who lived at Chautála. This *fakír* had one fair daughter, who, being of somewhat weak intellect, wandered about the country in a state of nudity. In her wanderings she strayed into Khíwa, whence the Máhni chief drove her out with contumely, thinking no doubt that she was no better than she ought to be. This was resented by her father, who cursed the clan in the following words addressing himself to the sacred tree near his abode :—

Chautálía gharmálía.
Ithon Khichí Máhní Kad:
Kahr Allah dá mária.
Na rahene vad.

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The Mirálís.

The Káthiás.

The Mirálís are Siáls who own several villages on the Rávi, and a little property on the lower Chenáb. The clan was originally located near Roránwáli, and was driven thence by the Bharwánás. Mirálí was the sixth in descent from Bharmí.

The Káthiás, who are one of the more important tribes in the Montgomery district, hold a considerable amount of property in the Shorkot tahsíl. For speculation as to the origin of this tribe, pages 33 to 37, Vol. II, of the Archæological Survey Reports, should be consulted. They are said to have gained a footing in the Jhang district in the following way :—In the days of Ináyatulla Khán, the Kamlánás, being displeased with his treatment of them, left their lands at Jalálpur and went down south and settled in the country of the Mooltan Nawáb. Ináyatulla sent messengers praying them to return, but they sent word back that they would only return at the Khan's personal request. The Khán accordingly set out from Jhang. Hearing of this, the Mooltan Nawáb, already enraged at the recent annexation of Islámábád, laid an ambuscade for the Siál chief. Ináyatulla obtained news of the design, and calling together an army of the Káthiás, Rajbánás, and other Siáls, retreated northwards. The defeat of the Mooltan Nawáb has been already noticed. The Káthiás displayed the most brilliant gallantry in the battle, and the grateful Ináyatulla bestowed upon them the lands that they now hold in this district. Previously they lived on the Rávi and in the lower part of the Sándal Bár. The Bharwánás, now resident at Káim, were the former residents. The Káthiás still maintain their character for being a fine, manly, handsome race. Fázil, their old leader, died some years ago, and the tribe is not doing so well as it did in his time. He managed to extinguish all internal feuds, or, at all events, to prevent their swelling to any injurious extent. Since his death the leadership has devolved upon his brother Ibráhím, a man of little ability or force of will.

Other Rájpúts.

Besides the Siáls the only true Rájpút tribes in the district are the Chaddhars, the Bhattís, and the Kharals. In three villages only do the Kharals hold property, all in the Chiniot tahsíl, and they acquired their land chiefly in the dowry of their wives.

The Chaddhars.

The Chaddhars, with their sub-families of Jappás, Rajokes, Sajankes, Kangars, &c., are settled in the country between Thatta Wárá Muhammad Sháh, and Sáhmal beyond Sajanke on the left bank of the Chenáb in the lower portion of the Chiniot tahsíl. Their origin is obscure. They claim to be descended from Rája Tus, Súraj Bansí. They left their home in Rájpútána during the time of Muhammad Ghori, and proceeded first to Baháwalpur. They were converted to Muhammadanism by Sher Sháh of Uch. From Baháwalpur they came to Jhang, and settled in the lands beyond the country of the Máhni chief of Khíwa. The head family is that of Tahlí Mangíní, represented by Fatah Khán, a *zaildár*. The Chaddhars of Tájá Berwálá are an old but decayed family. The Jappás are represented by a *zaildár* Patháná of Bhowáná, and the Kangars by Ghaus of Kurk. The Chaddhars

are good agriculturists, and less given to cattle theft than their neighbours, the Harals and Siáls.

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The Bhattís.

The Bhattís hold a considerable tract of country, called Bhattíora in local phrase, between the Sháh Jíwana villages on the west and the Lálí country on the east. With the exception of three villages, the tract is in the Chiniot tahsíl north of the Chenáb. The principal villages are Ghoríwála, Kot Sultán, and Barrána. The origin of this tribe is discussed at pp. 19--22 of the Archæological Survey of India, Vol. II. The tribal tradition is that they emigrated from Bhatner in Rájpútána. Their first settlement in this district was at Jandmáli, on the right bank of the Jhelam, not many miles from the Sháhpur boundary. They migrated thence to the country which they now hold, over which the Sayad chief Latíf Sháh then ruled. The Bhattís are a fine race of men, industrious agriculturists, hardly at all in debt, good horse-breeders, and very fond of sport. They do very little cattle-lifting, but are much addicted to carrying off each other's wives. Sardár of Kot Sultán and Chaghatta of Barrána are the Bhatti *zaildàrs* and among the most influential men of the tribe. The tribe owns only one village on the river; all the rest are in the Utár.

The Beloches.

There are a considerable number of Beloches in the district, but with one or two exceptions all their villages lie to the west of the Chenáb. Above Kot Khán, the old limit of the Siál country, the Beloch villages are numerous on both sides the Jhelam, but below on the left bank there is not a single Beloch village properly so called. They are said to have settled in the district before the Siáls. Bábar in his memoirs mentions that there was a colony of Beloches in the countries of Bhera and Khusháb. This was in 1519 A.D., and it must have taken the Beloches some time to spread east as far as Bhera. The tribal tradition is that the Beloches first came into this part of the Punjab in the reign of Sháh Husain, the Langa ruler of Mooltan. This was early in the 15th century, and after the arrival of the Siáls. But, on the other hand, there is undoubted evidence that the Sándal Bár east and south of Jhang was held by Rind Beloches before the Bharwána Siáls, and the Beloches were only driven out after severe fighting. The Beloch head-quarters were at Mírpur near the Rávi. Again, west of the lower Chenáb, the country along the banks of the river was certainly occupied by Beloches before the Rajbána Siáls pushed their way down to Ahmadpur. In fact the Beloches seem to have been in force and to have strenuously resisted the Siál advance. Possibly, however, the date generally accepted of the arrival of the Siáls may be wrong, or it may have taken the Siáls longer to spread over the country than is generally supposed; but at all events it seems to be satisfactorily established that the Beloches were holding the southern portion of the Sándal Bár and the country west of the Chenáb before the Siáls. The Beloches in this district never attained any importance. They have furnished no chief. Among them are to be found representatives of almost every clan and tribe. They possess no distinctive moral or physical features distinguish-

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ing them from other tribes ; they are good agriculturists, though not very industrious. They are not addicted much to cattle theft. Among their leading men are Muhammad Khán Gádi, Sultán Khán of Márí, Ghulám Haidar of Kot Shákir, Sher Khán of Bulla. Of the Beloches of Jhang, 5,223 returned themselves as Rind, 1,849 as Jatoi, 774 as Hot, and 696 as Lashári by tribe in the Census of 1881.

The Gilotars.

The Gilotars are located between the Nissowánás and the Chenáb in the northern portion of Chiniot adjoining the Sháhpur district. They have no trustworthy traditions as to their origin. Their location in this part of the district is of comparatively recent origin. Several of their villages were grants from Sáwan Mal. They are a curious mixture of good and bad qualities, first rate agriculturists, and irreclaimable cattle-lifters. It is in their villages only that sugar-cane and maize are largely grown. Ismáíl Gilotar of Gandlánwáli and Murád of Burj Mal are their leaders.

Kukárás.

The Kukárás or Nekokárás claim to be a branch of the Háshmi Kuraishís, but there is some doubt as to the fact. Shekh Nasíruddín came to Baháwalpur 450 years ago, and founded a village there called Shekh Wáhan. His family became followers of the Sayad of Uch in the same country. The family increased and multiplied, and the members began to emigrate northwards to Jhang, Gujránwála and other districts. There are Kukárás in all three tahsíls in this district, and all claim to be descended from the same ancestor.

The Nissowánás.

The Nissowánás inhabit the northern corner of the Chiniot tahsíl between the Lálís, Gilotars, and the Sháhpur boundary. They claim to be a branch of the Khokhars. In the Sháhpur Settlement Report they are described as "notorious for their thieving propensities and generally lawless character." They still retain these qualities in a softened degree. They are a prosperous thriving clan, rich in flocks and herds, with scarcely any debts. Rája of Kándíwál, Bákar of Babrána, Mehra of Lole, are the leading men.

The Lálís.

West of the Nissowána country along the edge of the Bár, as far as the Bhatti villages, come the Lálís who have a fabulous origin in the plains of Khurásán. Their headmen are Rája, Muhammada and Gholám, all *zaildárs*. Lálían is their largest village The Lálís are not a very fine or spirited race of men, and differ both from the Bhattís and Nissowánás in this respect. They are mostly in debt, though there are one or two notable exceptions. They are not very first class farmers, and prefer grazing their cattle round a strip of *bárání* cultivation in the Kirána Bár to anything else.

The Harals.

The Harals are another tribe holding villages in the Chiniot tahsíl only. From Murádwála to Sáíke, both on the left bank of the Chenáb, their villages are thickly studded along the bank of the river. They are said to have settled here during the rule of the Mughal Emperors, but it is probable that their coming was at an earlier date. Tradition makes them a branch of the Ahírs. They are the worst thieves in the district, except perhaps

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the Gilotars, and bad cultivators. They own great numbers of horned cattle and sheep and goats, and pasture them in the Kirána and Sándal Bár alike. Sujáwal and Vasáwa, *zaildárs*, Sukha of Murádwála and Bálá of Sáíke, are the leading men of the tribe.

The Marals.

The Marals at the present time do not own a single village, yet in past times they must have been an important tribe, for we constantly hear of them in the local lore. They claim to be Rájpúts, Chuháns of the Súraj Bansí race, and to have settled at Thatta Wárá beyond Khíwa in the Chiniot tahsíl during the reign of Akbar. The Sháh Jíwana legend makes them the proprietors of the lands where Sháh Jíwana now stands. Probably they occupied the tract between the Khíwa Siáls and the Chaddhars on the left bank, and also some lands on the right bank of the Chenáb. A few families still live in Maralwála, but are hereditary tenants only. There are a fine bold-looking set of men, have rather a bad reputation for cattle-lifting, and are not very desirable tenants. The cause of their decay is not well known.

Miscellaneous Sayads.

The history of the Sayads of Uch and Rajoá has already been given. It remains to notice the other Sayads, *viz.*, the Sháh Jíwanana and the Shekh Sulemána and other branches of the Bukhárí family; the Mashadí, the Gílání, and Bákrí families. The Sháh Jíwanana are the descendants of Sháh Jíwana, whose shrine is at the village of the same name. Many of the villages round are owned by this family, but Latíf Sháh and Hassan Sháh of Karíwála do not belong to it, though they are members of the Bukhárí branch. The Shekh Sulemána Sayads reside at Thatti Bálá Rája, west of Chiniot, at Chiniot itself, and several villages east of the town. Their followers are exceedingly numerous, and their income from offerings very large. They are careless landlords, addicted to intoxicating drinks and drugs, and not very estimable characters. The other Sayads hold so few villages as to need no mention.

The Akerás are Jats holding a small tract of country on both sides the Jhelam, just above Kot Khán, the limit of the old Siál rule. Their ancestor Khizr is said to have acquired the land by grant from Walidád Khán, in whose service he was for some time employed. They are thrifty and industrious zamíndárs, and breed a very good wiry little horse, something like the Beloch in shape. The headmen are with one exception well off. Sabbar and Hashmat are the two principal men of the tribe.

The Dabs are Jats, and own the large village of Dab Kalán, with a few others adjoining in Shorkot. They are good agriculturists. Bahádar, the *zaildár*, is their leader.

The Jútás are also Jats in spite of their brand-new pedigree table, that makes them out to be the descendants of one Jútá, a Manás Rájpút, and narrates that they were originally settled in Kashmír territory near Jammú, and migrated to Jhang in the days of Walidád and Ináyatulla. They hold two large villages and shares in several others. As agriculturists, they are industrious, but retain a *penchant* for cattle-lifting. Umrá of Alayár Jútá is their head.

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Miscellaneous Jats.

The Jhandírs hold a few villages in the extreme south of Shorkot on the right bank of the Chenáb. Their name is said to be derived from *jhanda*, a standard, as their ancestor had been a standard-bearer to the prophet or some of his descendants. This would give them a western origin, but the story is somewhat mythological. Though not openly professing to be religious directors, there is a certain odour of sanctity about the tribe. Most of the members can read and write. The droning monotone of Korán-reading is always heard in their villages, and the elder members affect a certain clerical tone in their dress and appearance. A favourite aphorism "*Dárhi Shekhán di, Kam Shaitánán da*" does not apply. The tribe is particularly free from ill deeds of every description.

The Kuraishís.

In the Shorkot tahsíl the place occupied by Sayads in Jhang and Chiniot is taken by Kuraishís. The more important Kuraishi families of Haveli Bahádar Sháh and Pír Abdul Rahmán are not recognised as genuine by the true Háshmi Kuraishís, the descendants of the celebrated Muhammadan saint Makhdúm Báhá-ud-dín Zakríá. For an account of the family, pp. 490—494, "Punjab Chiefs," should be consulted. The Háshmi Kuraishís are represented in this district at Hassú Balel in Shorkot, and at Dosa and Sháh Shakúr in Jhang. Their character does not differ from that of other holy tribes. Makhdúm Jalál of Hassú Balel is a man of large property and influence, and a *zaildár*.

Other tribes.

Among other tribes holding land in proprietary right in the district are Mangans, Siprás, Laks, Asís, Mathrumás, and many others, but all too insignificant to merit separate notice.

The trading classes.

The trading classes are recruited almost entirely from Arorás, Khatrís and Khojahs. Only a few Brahmins are engaged in business. The Arorás are the most numerous, and are divided into an infinity of clans. They are the chief money-lenders and capitalists of the district, and also the chief creditors of the agriculturists and mortgagees of their lands. Many hold land in proprietorship. The Arorás have the reputation of being a most industrious, energetic, and laborious tribe. A local proverb embodies the idea:—"*Badha lak Aroriún, munah koh Lahor.*" "When an Arora has girded up his loins, he makes the distance to Lahore only three-quarters of a *kos*." According to the proverb, a Kirár is not so merciless in his dealings with the zamíndárs as a Khojah:—"*Kirár dandáli Khojah phahora*," meaning that a Kirár like a toothed drag-rake leaves something behind, but a Khojah like a muck-scraper leaves nothing, is a favourite simile. They are invariably termed Kirár, which is also used to denominate the whole Hindú population. Kirár is not a complimentary appellation. Meeting a Gondal tenant-at-will once near Jhang, Mr. Steedman mentioned that his tribesmen in Gujrát were great thieves. "Ah, yes," he replied, evidently taking what was said as very complimentary, "but here I don't do anything of the sort; I have not got as much spirit as a Kirár." The term is often used by Khatrís and Brahmins towards their co-religionists, the Arorás, but hardly ever by an Arorá of them. Except in the large villages and the towns, there are but few Khatrís in the district. The principal clans are Katiáls, Kapúrs, Khannás,

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The trading classes.

Mehrautrás, Saihgals, Maggús, Mahtás, Dhawans, and Talwárs. All are engaged in business, except the Khannás, who own the village of Kot Maldeo, and prefer Government service to any other employment. There are proportionately more Khatrís at Chiniot than elsewhere. At Chiniot, too, is a large colony of Khojahs, many of whom are traders on a large scale, with branches and correspondents at Calcutta and Bombay. They are converts from Hinduism, as is clearly indicated by the fact that many of their family divisions bear the same name as those of the Arorás and Khatrís. The date of their conversion is put at 400 *Hijra*, and their first settlements were at Thatta Wárá and Dáwar, both villages in the Chiniot tahsíl. They migrated to Chiniot about 120 years ago in Sambat 1816, which is said to have been at the time held by the Bhangi Sikhs. There they appear to have thriven, and to have been entrusted with posts of importance. When Ranjít Singh took Chiniot, Mián Sultán, a Khojah, was over the citadel, and though the Bhangi forces had been defeated outside the town and the Bhangi leader taken prisoner, he held out stoutly and refused to desert his charge or open the fort except at the order of his master. Ranjít Singh, the story goes, was so pleased with his stubborn fidelity, that he made him a grant of Kálowál and Changránwála, formerly the property of Ríháns, the greater portion of which is held by Khojahs to this day. There are no Khojahs in Jhang, but many have settled in Maghiána, and are among the wealthiest and most public-spirited of the residents. Of the Arorás, 18,004 returned themselves as Utrádhi, 2,185 as Dakhana, and 23,541 as Dáhra in the Census of 1881. The chief divisions of the Khatrís according to the same Census are shown below:—

SUB-DIVISIONS OF KHATRIS.

Name.	Number.	Name.	Number.
Punjabi ..	6,634	Dhálghar ..	250
Báhri ..	1,594	Kapúr ..	1,182
Panjzáti ..	740	Khanne ..	469
Chárzáti ..	2,322	Mehrautra ..	1,614

NOTE.—Many of these are shown twice over; thus 940 of the Mehrautra are also shown as Chárzáti, and nearly all the Kapúr as Báhri or Chárzáti.

Agricultural character of each tribe.

It is difficult to define the quality of each tribe as agriculturists, the variations are so great. In Chiniot the Jat villages along the river bank are excellently farmed. Towards the Bár the cultivation is most inferior. In Jhang the Siáls on the Jhelam are often careful and industrious cultivators. On the left bank of the Chenáb they care little for agriculture, and keep large herds of cattle. Some Haral villages are well cultivated, others are deserted if after favourable rain there is good grass in the Bár. On the whole the Jats are the best cultivators in the district, but even their cultivation taken all round is nothing very wonderful. Naturally they are inclined more to a pastoral life and cattle-lifting than to driving a plough. A Jat who farms his own land seldom farms it badly, and is a better cultivator than the Jat tenant-at-will. Some of the Khokhar villages near Kot Isa Sháh will compare with any in the district. The Siáls are not good culti-

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Agricultural character of each tribe.

vators. The better families have hitherto considered it dishonourable to touch a plough, but this feeling is now confined to families in affluent circumstances. Poor Siáls have to cultivate, just as any other zamíndár, to earn their daily bread. In old days, no doubt, the livelihood of the Siáls who dwelt along the Chenáb depended more on their cattle than on agriculture ; and their wealth in herds more on their audacity as cattle-lifters than their skill as cattle-breeders. Now-a-days this source of income is far less profitable. Cattle theft is still rife, but the chances of detection, where it is carried on in a wholesale manner, are too many to allow it to be adopted as a safe and lucrative calling. In old days a band of Chenáb thieves would swim a whole herd of buffaloes from the Chiniot tahsíl to Shorkot, and there dispose of them. Theft now, except in the Bár, does not go ordinarily beyond a buffalo or two, or a pair of bullocks. With the decline of cattle-lifting as a livelihood, agriculture has come more into favour. The large extension of cultivation, especially in *sailàb* lands has diminished the number of cattle in many parts of the district, notably on the Jhelam, and rendered a recourse to agriculture for a living more a matter of necessity than of choice. Cattle grazing as a means of livelihood can only be profitably carried on in villages containing a large quantity of pasture land, either in river (*belás*) or in the Utár. On the Jhelam almost all available land has been cultivated. On the Chenáb the villages usually contain a large quantity of waste more or less suitable for grazing. Large herds of cattle are kept, and the income therefrom is probably greater than from the land. In such villages cultivation is inferior. The proprietors do not hesitate to neglect their fields for the sake of their cattle. The difference between the farming of the Siáls on the Jhelam and those on the Chenáb is very great. Sayads are bad managers, and they hardly ever touch a plough. They are a thriftless extravagant class, about the worst bargains Government has. Hindús are first class cultivators, most industrious and careful, but they cultivate but little land. Beloches are a little superior to the Siáls. Chaddhars and Bhattís are prosperous farmers, and are both good managers and careful cultivators. The Khojahs and the other miscellaneous Muhammadans do not cultivate much themselves, but they look after their property very carefully, and their land is, as a rule, exceedingly well cultivated. Kamíns are about as bad cultivators as a landlord can get.

Tribal restrictions upon intermarriage.

In his Census Report for 1881, the Deputy Commissioner wrote :—

"Tribal restrictions in marriage are jealously observed by the people. Among the Muhammadans the Sayads freely take the daughters of others in marriage, but give their own daughters only to men of their own caste. A Sayad would hold it a dishonour to marry his daughter to a Mughal or Pathán, though not actually a sin ; for strict Muhammadan law declares that 'all Muhammdans are brothers.' Hindú caste restrictions seem to have been adopted by Muhammadans with regard to marriage. The *Kuraishís*, claiming to be the direct descendants of Muhammad, follow in this district the customs of the Sayads in this respect. Rájpúts prefer giving their daughters to Rájpúts, and seldom give them to Jats, though they take daughters in marriage with no restriction

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Tribal restrictions upon intermarriage.

whatever. The Hindús are chiefly composed of Brahmans, Khatrís, Arorás and Bhátiás. The Brahmans do not give their daughters in marriage to the other sects but marry among themselves. Khatrís are primarily of two kinds, the *Báhrís* and the *Banjáhís*. The *Báhrís* again are sub-divided into *Adháighar*, *Chárghar*, *Bárághar* (literally 2½ families, 4 families, and 12 families). *Adháighar* may marry the daughter of *Chárghar* and the latter of *Bárághar*, but *Adhái* or *Chár* would not give daughters to *Bárá*. The above three sub-divisions may intermarry among themselves, but if an *Adháighar* should marry a daughter of *Bárághar*, he is degraded to *Chárghar*. If he gives a daughter to *Chárghar* or *Bárághar* he descends to the caste into which he has married his daughter. *Bárághar* may take the daughter of *Banjáhís* without losing their own caste. The *Banjáhís* intermarry among themselves and give their daughters to *Báhrís*, but have no right to take daughters from *Báhrís*. The Arorás are chiefly composed of *Utrádhís* and *Dáhrás*. The former intermarry among themselves and take daughters from *Dáhrás*, but never give them. The *Dáhrás* marry in their own tribe. The Bhátiás have the same sub-division as the Khatrís, with this difference, that the former are considered of secondary importance to the latter, and indeed to the Arorás. The Bhátiás intermarry among themselves."

SECTION D.—VILLAGE COMMUNITIES AND TENURES.

Village tenures.

Table No. XV shows the number of villages held in the various forms of tenure, as returned in quinquennial Table No. XXXIII of the Administration Report for 1878-79. But the accuracy of the figures is more than doubtful. It is in many cases simply impossible to class a village satisfactorily under any one of the ordinarily recognised tenures; the primary division of rights between the main sub-divisions of the village following one form, while the interior distribution among the several proprietors of each of these sub-divisions follows another form, which itself often varies from one sub-division to another. In Jhang especially the form of village tenure is peculiar, as will be shown in the following pages. The statement below shows the village tenures as classified by Mr. Steedman at the recent Settlement :—

	Chiniot.	Jhang.	Shorkot.	District.
Zamíndári	1	8	2	11
Communal zamíndári	16	24	8	48
Pattídári	1	...	...	1
Bhayáchára	111	189	112	412
Imperfect Bhayáchára and pattídári	123	125	54	302
Government property	13	12	15	40
Total	265	358	191	814

The prevailing tenure of the district is a kind of imperfect Bhayáchára, known as *Bhayàchàra chàhwàr*. In the occupied lands, wells and *sailàb*, possession is the measure of right. The unattached waste is generally village common; held, it may be, on *khewat* shares, where the joint right of each Khewatdár is measured by

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the share of the village assessment paid by him, or individual right is represented by the fraction of the total area of the village held; or on ancestral shares by the descendants of the original founder or founders of the village to the exclusion of the other proprietors.

Proprietary tenures.

Table No. XV shows the number of proprietors or shareholders and the gross area held in property under each of the main forms of tenure, and also gives details for large estates and for Government grants and similar tenures. The figures are taken from the quinquennial table prepared for the Administration Report of 1878-79. The accuracy of the figures is, however, exceedingly doubtful; indeed, land tenures assume so many and such complex forms in the Punjab that it is impossible to classify them successfully under a few general headings. This is especially the case in Jhang and the neighbouring districts, where the constitution of what most nearly corresponds with the village communities of the Eastern Punjab, and the general form of rights in land, are exceedingly peculiar, unusual incidents attaching even to the ordinary form of mortgage. The peculiarities are owing partly to the scattered and precarious nature of the cultivation, and its entire dependence upon water other than rainfall; but still more, perhaps, to the nature of the revenue system that obtained under the government that preceded our own. It is therefore impossible to describe existing rights and tenures without first discussing the revenue policy to which they so largely owe their existence.

Proprietary right under the Siáls and Sikhs.

Proprietary right, as the term is understood now-a-days, can hardly be said to have existed either under the Siáls or under the Sikhs; as has been very truly remarked in the Settlement Report of a neighbouring district:—"It must always be remembered that "under native rule no such thing as *absolute* proprietary right was "recognised. The missing class was not the hereditary tenant, but "the proprietor." It is difficult, perhaps impossible, to define with any accuracy to what extent rights of property in land did exist, but they were certainly not extinct. The ruling power was not an all powerful landlord, nor were all the subjects, except those enjoying special privileges, merely tenants-at-will. That some rights of transfer and mortgage were possessed and exercised during the reigns of the latter Siál Kháns is abundantly proved. Many undoubtedly genuine deeds were produced in land cases during the recent Settlement. The history of the district and of the tribes that inhabit it, plainly shows that since the time of Walidád Khán there have been no great changes in the location of the tribes. They still hold the same villages that they then held. The lands of Kot Khán are still the property of the descendants of Walidád's successful lieutenant, Sharíf Khán Aliána. The Rajbánás are still the proprietors of the villages conquered by their ancestors from the Beloches. Even the Nauls, though subjected by the Siáls, possess most of the lands, lying on either side of Jhang, that they held before the advent of their subduers. At the same time the property of the subject was strictly confined to the land in his possession; that is to say, to the land cultivated by the subject, with a reasonable amount of immediately adjoining culturable

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Proprietary right under the Siáls and Sikhs.

waste. Beyond this the individual had no proprietary rights whatever. Neither under the Siáls nor under the Sikhs were there village estates with demarcated boundaries as there are now. These are our creations, exotics transplanted from the plains of the North-Western Provinces. Knowing the main facts of the history of the Siál tribe, it is not difficult to picture how fluid must have been the state of property when they first settled in the country, and how it gradually hardened during the later reigns of the Kháns and under the Sikhs. The Siáls for some time after their arrival were shepherds and herdsmen, and the extent of their agriculture, judging from the state of the district at annexation, did not probably exceed what the nomad tribes of the Bár practise at the present time. They did not even cultivate the easily-tilled lands subject to annual floods from the river. Mr. Monckton speaks about the dense *jhàù jangal* on the banks of the rivers in his time. The word *Màrù* is still the prefix in the names of several villages on the Chenáb, signifying a dense and dangerous *jangal*. Until Walidád's time the Siál Kháns were merely tax-gatherers under the Imperial rule, and we know but little about the condition of their subjects. Hitherto the Siáls had been multiplying and spreading over the land, and the different clans settling down permanently in the various parts of the country they now occupy. These settlements are the nuclei of our present villages. The inhabitants cultivated more or less land near the hamlet and on their neighbouring wells. Adjacent villages or settlements seldom interfered with one another. There were no boundary disputes, because there were no boundaries. The intermediate waste was the property of the State. The population in those days must have been very scanty, and the non-existence of boundaries did not prove inconvenient, as the waste lands did not belong to the villagers. A certain proportion of the produce was taken by the Government of the day, and so long as this was paid and the lands held by the individual were not badly cultivated, the cultivator was left in peace. So long as a good revenue was yielded, the Government asked no questions ; but if the subject was found to be in possession of land that he did not cultivate, or endeavouring to cultivate more land than his means would allow of, the Khán had no compunction in granting the uncultivated land to any applicant who applied for it, or in making over the excess of the land cultivated to any other person who had the requisite capital for its proper cultivation. The object of the ruler was an increase of revenue, and if occupancy or proprietary rights, as we understand the terms, stood in the way of its attainment, it was so much the worse for them. If this was the case under the later Siáls who might be expected to have had some compassion for their subjects, it was only too probable that under the Sikhs the disregard of property in land should be intensified, and that the rulers, Hindús by caste, should have employed every device to wring as large a revenue as possible out of a subject Muhammadan race.

Hàthrakhàidàrs.

The extortionate tyranny of the Sikhs, and also of the later Siáls, gave rise to a new species of right—that of *Hàth*,

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Háthrakháídárs.

rakhái or *taalukádári* as it is also called. There is no difference between the two rights, and in every case the origin of the tenure is the same. The original proprietor is always in cultivating possession of the land. The broken-hearted cultivator of the land, who was also the proprietor, finding the demands and exactions on account of revenue absolutely unbearable, made over the proprietary share of the produce, and with it the responsibility for the revenue, to some influential man whom the Government treated with consideration, who assented to the arrangement, thinking that he would probably be able to make something out of the contract, for contract it was at the outset and nothing more. The cultivating proprietor said to the contractor, "I cannot pay the revenue any longer. Do you take the proprie-"tary share of the produce, allowing me some fee in recognition of "my rights, and pay the revenue, yours being the profit and loss." The contractor who thus engaged to pay the Government revenue in consideration of the proprietary share of the produce, minus the proprietor's fee, is called *Háthrakháídár, Háthrakhnewála*, and the person who makes over the produce and withdraws from the responsibility for the Government revenue, *Háthrakhwánewála. Háth rakhná*, to place the hand on, is equivalent to "to protect," and the causal form means to get the hand placed, to obtain protection. Originally there were no conditions as to the termination of the contract, but it was undoubtedly understood to be terminable at the will of either party, and if we find that this power was seldom if ever exercised, the fact will be intelligible enough when the character of the Siál and Sikh revenue administration is recollected. As a rule, the original proprietor would not be anxious to regain his "rights, symbols more of misery than of benefit," and the *Háhrakháídár*, perhaps paying nothing, or only at the most favourable rates to the Khálsa exchequer, would be in no hurry to renounce an easy and lucrative source of income. But had the *Háthrakháídár* lost his influence with the Governor and been squeezed for revenue as an ordinary agriculturist, he would have thrown up his contract, and the original proprietor would not have thought of raising any objection. Conversely, the right of resumption would belong to the original proprietor. In Chiniot and Shorkot the amount of land held by these middlemen is very small. They are most numerous in Jhang, and the land they hold is generally on the banks of the Jhelam. The Nath Sáhib of Jhang, a Hindu *fakír*, Charan Dás Sarrát, Brahmins, Gusáins, and others, who, as religious devotees, were held in much consideration by the Sikhs, are the large *Háthrakháídárs*. At the first Regular Settlement the general opinion of the Settlement Officer was that the *Háthrakháídár* was to use Mr. Vans Agnew's words:—"A "*mustájir* on the behalf of the proprietor for the Government revenue "taking a share of the produce." He was considered to have no power to alienate his status, for the proprietor might not have confidence in the third party to whom the *Háthrakháídár* wished to transfer his privilege. Mír Izzat Alí's opinion, dated 23rd August 1855, to which Mr. Monckton generally agreed, is still extant. He considered the *Háthrakháídár* to be a simple *mustájir*, having no

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power of transfer, and that the contract was terminable at the will of either party; but unfortunately he never could bring himself to interfere with the *status quo ante* in the cases affecting the tenure that he had to deal with. He noted that cases had occurred where the *Hàthrakhàìdàr* had been ousted by the original proprietor either of his own motion or through the action of a *Panchàyit*, and also where dispossession had taken place in accordance with a judicial order. But as far as has been ascertained, not a single order of any Court has been discovered terminating a *Hàthrakhàì*. In all cases the settlement was made with the *Hàthrakhàìdàr* without any condition whatever as to the nature of his tenure. The consequence is that the right of *Hàthrakhàì*, the right to take the proprietor's share of the produce, minus a fee, varying in amount, in recognition of the rights of the original proprietor, has crystallized into a permanent transferable and hereditary right. The *Hàthrakhàìdàrs* being men of power have been steadily encroaching on the rights of the original proprietor ever since the old Settlement, and have acquired by prescription certain privileges in regard to trees and *bhùsa* to which they originally had no right whatever. Hitherto the *Hàthrakhàìdàr* has not claimed any right to the land, and right he has none. All that he can claim is his share of the produce. He cannot claim to share in the land by partition, and he has nothing whatever to do with arranging for the cultivation. As a rule, the *Minar*, *Jakh*, *Rasùl arwahi* and *Ganesh* fees belong to the original proprietor. There are some doubts as to *Bhàrà* and *Mohassìl* fees. Between the *Hàthrakhàìdàr* and the *Mustàjir* or *Mushakhsàdàr* of the Dera Ismáil Khán district there is an important distinction. The *Mushakhsàdàr* was a farmer of the revenue appointed by Government generally over a whole village or *ilàka*. The *Hàthrakhàìdàr* is the nominee of the individual, the entrustee of his privilege, to take the proprietary share of the produce and pay the revenue. The *Mushakhsàdàr* takes the *mahsúl*, the Government share of the produce, and there is no contract between him and the zamíndár. The share taken by the *Hàthrakhàìdàr* is the result of an agreement between him and the original proprietor. Viewed in the light of our present revenue administration, the contract appears to be a very one-sided transaction, but at the time it was made, the consideration was material and valuable, *viz.*, protection from the extortionate demands of the Sikh farmer. Now the contract exists in virtue of prescription, while the reasons for its existence have passed away. If the right course would have been to oust these entrustees of the right to pay the revenue, the Regular Settlement was the time and opportunity for such a measure. The tenure was then comparatively in its infancy, but now more than 20 years have been added to its age. One reason why the *Hàthrakhàìdàrs* maintained their position was the doubt and distrust with which our first Settlement operations were regarded by an ignorant people. In fixing their boundaries even, their object was not to include as *much* but as *little* land as possible within the village. Instances of this are numerous.

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Taraddadkàrs.

The *taraddadkàri* tenure also dates from the time of the Siáls, though it was under Sáwan Mal's fiscal administration that it was most fostered. This tenure is closely allied to the *adhlàpi* and *chakdàri* tenures of the southern districts of the Mooltan and Deráját divisions. The conditions and circumstances under which the *tarraddadkàri* tenure arises and has arisen are exceedingly diverse, and that the rights and privileges of the *Taraddadkàr* are of great variation. The highest form of the tenure is where the *Taraddadkàr* is a full proprietor; the lowest where he is nothing more than a tenant who, so long as he cultivates, cannot be ousted, but whose rights are neither transferable nor hereditary. The indigenous relations subsisting between proprietors and tenants in this district have favoured the growth of this tenure, no less than Sáwan Mal's efforts to extend cultivation. In Jhang it is the proprietor who runs after the tenant and beseeches him to cultivate his well. The proprietor often found, and even now often finds it worth while to make over a well in working order to a tenant, on the terms that he should pay half the proprietary share of the produce to the proprietor, who remained responsible for half the revenue, and himself retain the other half and pay half the revenue, it being understood that so long as the tenant continued to cultivate or arranged for cultivation he could not be ousted from the land so made over. Any person holding land belonging to another on these terms is called a *Taraddadkàr*. He has taken the land or the well on *taraddad*. His tenure is *taraddadi* or *taraddadkàri*. Where a well in working order was made over, if the making over took place many years ago, the *Taraddadkàr's* right will probably be hereditary but not transferable. His son will succeed him, but he cannot sell or mortgage his rights, as the agreement is a personal one. Where, however, the proprietor of the land made it over to a *Taraddadkàr*, who constructed a well in it at his own expense, the *Taraddadkàr*, in the absence of any express agreement, is a full half proprietor. So long as the well lands are undivided, the *Taraddadkàr* proprietor is responsible for the cultivation of the land, and either loses his rights or becomes liable to be cast in damages at the suit of the original proprietor of the land, if he fails to cultivate or cultivates in a manner contrary to good husbandry. But he has the power to partition the well estate; and once partition is effected, he becomes absolute proprietor of half the water and of the land that has fallen to his share. The right to claim partition is the test of full proprietary right. If the *Taraddadkàr* cannot claim partition, he is not a full proprietor, whatever his other privileges. All *Taradddkàrs* have the power of arranging for the cultivation. It does not matter whether the *Taraddadkàr* cultivates himself or by a tenant. So long as the land is cultivated, the original proprietor cannot interfere. The above remarks apply chiefly to old *taraddadi* tenures. Of late new tenures of this description have been chiefly created by deed, and it is only where the deed is silent that evidence of local custom is admissible. The original proprietor has, however, to be very careful how he treats his *Taraddadkàrs*. In one case the deed creating the tenure declared that the *Taraddadkàr* had

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no power to mortgage. He wanted to mortgage, but the proprietor refused to allow him to do so. The *Taraddadkàr* then threw up the well, and the proprietor found himself saddled with a well out of work but bearing an assessment, and with but little hope of obtaining a tenant. Instances of the *taraddadi* tenure on *sailàb* lands are exceedingly rare, even if they occur at all. The rights of hereditary tenants on *sailàb* lands are analogous to those of *Taraddadkàrs*, but an occupancy tenant hardly ever pays half the revenue. As a rule, he pays at the same produce rates as the tenant-at-will. His occupancy rights were acquired by his breaking up the land. He probably also took the entire crop for the first one or two years rent free.

Taalukdàrs.

Of the true *Taalukdàri* tenure in this district a few instances only are found. The terms *Hàthrakhàì* and *Taalukdàri* have become somewhat confused, as under the former tenure the original proprietor is called *Taalukdàr*, and his proprietary fee taken from the *Hàthrakhàìdàr*, *hak-taalukdàri*. Rights similar to those of superior proprietary right are also styled *Taalukdàri* in Jhang, *e. g.*, where cultivators during the rule of Sáwan Mal became so far independent that they were created proprietors at the first Settlement, subject to a small cash *màlikàna* payment to the original lords of the soil.

Proprietary right under Sáwan Mal.

The fiscal administration of Sáwan Mal left indelible marks on the proprietary system of the district. The theory that the land belonged to the State was carried by him to far farther lengths than it had ever been carried before. Under the Siál rule the rights of the dominant tribe had been more or less respected, but under the Díván they saw men who and whose ancestors had as tenants tilled their lands from time immemorial, and, as inferiors, had given them their daughters in marriage, elevated to the rank of full proprietors. Under Sáwan Mal any person who broke up land in any portion of the district, or who set to work a well that had been deserted, became the proprietor of that land or well. In practice the Díván held that no man had any right to any land that he could not cultivate, and grants of waste land were given to anybody who could bring it under cultivation. Not only did this take place, but many persons who had formerly been tenants-at-will found themselves invested with the doubtful privilege of paying direct to the State. The proprietors dropped out because there was no room for them. The State took everything it could from the cultivator, and the idea of a middleman intercepting part of the collection was not for a moment entertained. Grants of waste *sailàb* land could be obtained by anybody who could pay the requisite *nazràna*. The result can easily be imagined. The Siál settlements and villages still remained Siál, but there was a strong infiltration of proprietors of every class. Nothing was sacred to Sáwan Mal. Chúhras and *kamìns* were in his eyes just as good proprietors, probably better than Siáls and Beloches. There were then no boundaries. The Siáls retained what they could cultivate. The waste was occupied by Sáwan Mal's colonists. Such a system was of course fatal to all proprietary rights over tracts, such as the superior proprietary rights

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that still exist in the Indus Kachhi and the Damán of the Dera Ismáil Khán district. When the representative of the Siál Kháns was dependent upon the charity of Sáwan Mal for his daily bread, it is not difficult to understand why no superior proprietary rights survived. Probably such rights, too, were not very common, though the Ahmadpur and Garh Máhárája Siáls and the Nawáb of Jhang have sometimes claimed that they did exist. The few instances of superior proprietary right that do exist, *e. g.*, those of the Rajoá, Thatti Bálá Rája and Alipur Sayads over Bukhári, Tárú and Buddhí Thatti, are creations of the Regular Settlement. The land belonged to the superior proprietors, but the inferior proprietors had been so long in possession by taking produce and direct payment of revenue to the Sikhs, that they were deemed to be entitled to the proprietorship, subject to the payment of a proprietary fee, usually a percentage on the *jama*.

The creation of villages at the Regular Settlement.

Shortly after annexation, the time between being taken up by two Summary Settlements, the Regular Settlement commenced, and it became necessary to fix village boundaries and to create private proprietary rights in land where they had never before been recognised even if, as is very doubtful, they had ever existed. The following quotation from Mr. Monckton's report describes how this was effected, and what the villages were when the Regular Settlement began:--

"The revenue arrangements of the native governments in the Mooltan province, never having recognised the village system, but dealing separately with each well or cluster of wells, there were naturally no well defined estates, and the *manzahs* in Mr. Cock's and the Summary Settlements were merely parcels of land paying revenue under one denomination, but with no fixed principles for their union. Generally there would be one principal village by which the name of the *mahàl* would be distinguished, with subordinate hamlets and outlying wells often at a great distance, and situated within the boundaries of another estate. In *parganàs* Chiniot and Jhang the *manzahs* were tolerably regular, and in making the demarcation of boundaries the outlying wells were treated as *chaks*, if their owners desired to continue attached to the parent village. In *parganàs* Kadirpúr and Uch the holdings appeared to have no tie in common. Many *mahàls* were composed entirely of portions of lands (wells ?) scattered among other estates and having no village site or any head whatever. These last were all abolished in the revised *hadbast*, and the estates were formed with reference to village sites only; no outlying *chaks* were left except in *jàgìr* villages. The people readily acquiesced in the change, and any other course would have led to indefinite complications in the preparation of the record of holdings and responsibilities, and in the determination of rights in waste land, especially the *sailàba*; while no collocation of holdings according to similarity of caste among a people wholly unaccustomed to act in common, offered so fair a chance of cementing a union as that of common interest involved in a compact topographical distribution."

Briefly, within the *mahàl* or village, the boundaries of which had been thus arbitrarily fixed, each man in possession of land of which he took the produce and paid the revenue was recorded as proprietor. The waste lands were almost invariably recorded

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The creation of villages at the Regular Settlement.

as village common land held on *khewat* shares. But little attention appears to have been paid to the determination of rights in the waste. In fact there probably were no rights. In some villages the cultivation was measured up alone, and alone numbered on the field map. If the people had understood our revenue system, and if there had been any inquiry into the proprietorship of the disused wells in the waste, there would probably have been a considerable diminution of the area recorded as village common. But the people were doubtless apathetic to a degree, and any energy evinced was rather directed against the acquisition of waste land, so that unless it had been reserved as Government property there was perhaps nothing to be done except to record the waste as village common. The waste lands included in the village boundaries were thus made a present to the khewatdárs. Mr. Steedman writes:—

"It would probably have been best to have retained to Government some such authority in respect to the sinking of new wells as was exercised in the Thal until the last Settlement of Dera Ismáil Khán; or, if Government was to retire completely, the old families of the district, the founders of the village, might have been given a preference over the motley crew whose proprietary rights only dated from the time of the Díván. Some of the Siáls managed to regain property of which they had been despoiled by the Sikh Kárdárs, but it was not much. Regrets, however, are now vain, and if mistakes were made, the lapse of 25 years has accustomed and familiarised the people to them, and the thing that is, is accepted as the thing that is right."

Riverain custom. Alluvion and Diluvion.

Mr. Steedman thus describes the riverain custom of the district:—

"The boundaries of opposite villages in the intermediate river bed have been demarcated at this Settlement, and the river measured and mapped. The main principles on which the boundaries were fixed were these. The boundaries of the adjacent villages were first mapped according to the Revenue Survey of 1855 and the Regular Settlement field maps. Then on the same map all land that had since accreted and been occupied and held by either village as proprietor was plotted. Land once so held was allotted to the occupying village. If any land still remained on which it was clear that nobody had been in possession, it was generally divided between the two villages, though if one village had since last Settlement acquired a large slice of the river bed, while the other had lost by diluvion, the major portion of the hitherto unappropriated land might be awarded to the latter. Although this has been done, I do not suppose that when land actually accretes in places where land has never within memory existed, the present demarcation between villages will be accepted without question. Within the village boundary there is one rule for the whole of the district. As far as I know there are no exceptions. If land held now or formerly in proprietary right decretes or has decreted, and subsequently land accretes on the site of such land, it will be the property of the proprietors whose land formerly occupied that site. As to newly accreted land, in regard to which no old proprietary right can be proved, I venture no opinion. Whenever such a case comes up, it must be decided on its merits, if there is no provision for it in the *Wájib-ul-arz*."

Mortgages.

Besides the ordinary form of mortgage, there is a kind of running mortgage called *Lekha Mukhí*, which is separately described

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Mortgages.

below. The ordinary mortgage is of the usual usufructuary kind. The mortgagee pays the revenue and takes the proprietary share of the produce. Redemption can only take place on the first day of the months of *Húr* or *Mágh*. The mortgagor is responsible for the cost of repairs to a well, the construction of a new one, if the old one falls in or becomes useless, and the mortgagee has in such cases full powers to construct or repair a well. The cost of such repairs, &c., is added to the original mortgage-money, and must be paid before redemption can be effected. The liability of the mortgagor for such charges may appear at first somewhat unjust; but when it is remembered that in this district generally land can only be cultivated by the aid of artificial irrigation, and that a useless well means no cultivation, it is not a matter for surprise that the mortgagee should insist upon conditions that assure to him the use of the well in good order as well as that of the land. The mortgagee cannot throw up his mortgage if the well falls out of work, and so long as the mortgage remains, it is he who will have to pay the assessed revenue. It is only fair, too, that a mortgagee, if the deed allows him to construct a new well, should recover its cost at redemption as the value of an unexhausted improvement. The mortgagor is also liable for expenses attendant on the breaking up of new land by the mortgagee for purposes of cultivation. The mortgagor almost invariably receives some fees in kind in recognition of his proprietary title; 2 *topás* per *kharwár* and 1 *topá* per threshing floor are as common fees as any. The mortgagee can cut trees for *bonâ fide* repairs to the well, the well buildings, and agricultural implements needed for the cultivation of the well lands. As a rule, the original proprietor is left in cultivating possession. Sometimes the mortgage deed expressly reserves to him the right of cultivation. There are instances of separate sub-mortgages of the right of arranging for the cultivation. In old deeds there is usually no stipulation as to the right to cultivate. In those of modern date the right is either distinctly reserved to the mortgagor or mortgagee, and if to the former, a stipulation is added that if the mortgagor fail to arrange for the cultivation of the land, the right to do so shall accrue to the mortgagee. In a very few instances the mortgagor remains responsible for the payment of the revenue. In recent mortgages it is often conditioned that redemption shall not take place until after a fixed period. In some mortgages the mortgagor is left in possession and pays the revenue, the mortgagee only charging the land with an annual payment in kind of a fixed amount.

Lekha Mukhí.

Lekha Mukhí is a running mortgage. The proprietary share of the produce is made over to the creditor, who pays the revenue and keeps an account of receipts and disbursements. *Lekha Mukhí* conveyances arise in two ways. One is where the proprietor has obtained a loan from the *Lekha Mukhídár*, and makes over a well or a share in a well to his management. The other is where an estate is made over to the *Lekha Mukhídár*, not so much as creditor as agent. The accounts are kept in the same manner in either case. The *Lekha Mukhídár* collects the crops

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Village communities and tenures.

Lekha Mukhí.

and credits the proprietor with their value. He debits him with the Government revenue, the costs of repairs, maintenance, &c., in fact with all working expenses and charges usually defrayed by the proprietor. His fee consists of the *muhassili* two *topás* per *kharwár*, and he also charges interest if the proprietor gets into his debt. The interest is never less than 12 per cent. per annum, and is often much higher. *Lekha Mukhí* in the hands of an astute Hindú is usually fatal to the zamíndár. The *Lekha Mukhídár* embezzles and peculates as far as he dares.

Proprietary rights in date palms.

In many villages of this district the proprietors of date palms are not the proprietors of the soil in which they stand. The origin of this tenure is obscure. In the Deraját the date palms were often the property of the State as a separate source of *sayer* revenue. In this district the date palms were separately leased, but were apparently never considered the property of the State. Perhaps the present proprietors, where they are not the lords of the soil, were originally the persons who contracted for the revenue from year to year, and were invested with the rights of property at the Regular Settlement. If old deeds are to be trusted, private proprietorship in these palms is of considerable age. Whatever its origin, the fact remains that the proprietors of the palms are often not the proprietors of the land, and where the proprietorship in young trees is in issue, the determination of the rights of the two proprietors is no easy matter.

Village officers.

The figures in the margin show the number of headmen in the several tahsíls of the district. The village headmen succeed to their office by hereditary right subject to the approval of the Deputy Commissioner, each village, or in large villages each main division of the village, having one or more who represent their clients in their dealings with the Government, are responsible for the collection of the revenue, and are bound to assist in the prevention and detection of crime. Chief headmen are not appointed in this district. The *zaildár* is elected by the headmen of the *zail* or circle, the boundaries of which are, as far as possible, so fixed as to correspond with the tribal distribution of the people. The *zaildárs* are remunerated by a deduction of one per cent. upon the land revenue of their circles or villages; while the headmen collect a cess of five per cent. in addition to the revenue for which they are responsible. In the three tahsíls of the district the *zaildárs* also enjoy small *ináms* or cash allowances annually which were made to them at Settlement. The head-quarters of the *zails*, together with the prevailing tribes in each, are shown on the next two pages.

Tahsil.	Zaildárs.	Village headmen.
Jhang ..	25	407
Chiniot ..	20	449
Shorkot ..	17	257
Total ..	62	1,113

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Village officers.

Tahsil.	Zail.	No. of villages.	Annual land revenue.	Prevailing caste or tribe.
			Rs.	
Tahsil Jhang.	Kot Isa Sháh ...	26	10,481	Baloches, Bhons, Patháns, Khokhars, Dhúdhís, Awáns, Sayads, Jaisaks, Bhuttás, Siprás, Kureshís and Láng.
	Chhattá, Bakhshá ..	15	10,132	Baloches (Gádís), Vinpáls, Dinárs and Kureshís.
	Laú .	11	4,938	Haidahans, Gopáls, Kaulars, Khokhars, Dhúdhís, Baloches, Kádís.
	Sháh Jíwana ...	24	4,881	Sayads, Akerás, Jhabánas, Hindu Arorás.
	Kot Khán ...	14	5,610	Akerás, Mals, Báhars, Siáls, Sayads and Sajokás.
	Saliána ...	13	5,772	Siáls, Turks, Arorás, Kureshís and Chelas.
	Masson ...	16	5,846	Siáls, Arorás, Khatrís, Baloches, Kalásans, Sayads, Khokhars, Saliánas, Kureshís and Bráhmans.
	Pír Kot Sadhána ...	10	5,459	Siáls, Kureshís, Sayads, Arorás, Baloches and Shahánas.
	Dhídoána ...	28	8,329	Baloches, Jat Jhabánas, Arorás, Siáls, Saliánas, Dirájs, Kureshís, Sadhánas, Mirjánas, Maghiánas, Khichiánas, and Khokhars.
	Chund Bharwána...	13	6,464	Siáls, Sayads, Daultánas, Kureshís, Bálís and Bharwánas.
	Pípalwála ...	17	5,970	Siáls, Chuchkánas, Kauriánas, Lakhnánas, and Sayads.
	Ratta Matta ..	12	4,906	Sayads, Jogerás, Bhattís, Bharwánas and Sámbhals.
	Kot Sultán ...	5	1,499	Bhattís.
	Khíwa ...	9	3,945	Bhochrás, Arorás, Sayads, Jogerás, Bharwánas and Sámbhals.
	Mukhiána .	8	4,743	Khánuanás, Bharwánahs and Sayads.
	Pakka Naulán ..	13	4,705	Nauls, Daukás, Pátoánás, Nekokáras, Jandránas and Sayads.
	Jhang ...	5	8,780	Siáls, Sayads, Bráhmans, Arorás, Khatrís, Maghiánas, Khojás and Hasnánas.
	Basti Gházi Sháb ..	15	4,709	Siáls, Arorás, Nekokárás, Maghiánas, Khatrís, Lak Badhars, Vijhlánas, Viraks, Hirájs and Baloches.
	Dhúín Muhammad	7	5,170	Khojás, Arorás, Siáls, Dirájs, Baloches, Bharwánas and Sayads.
	Haveli Bahádar Sháh	9	2,309	Sargánas, Gagránas, Sayads, Chaddhars, Kureshís and Arorás.
	Wású Asthána ...	31	12,780	Chelas, Arorás, Baloches, Sayads and Khokhars.
	Máchhíwál ...	26	8,300	Baloches, Siáls, Arorás, Bhuránas, Sayads and Kureshís.
	Kot Shákir ...	8	5,995	Baloches, Siáls, Khokhars and Arorás.
	Belá Shahr ..	6	3,635	Akerás and Bharokas.
	Márí Sháh Sakhira	17	5,960	Baloches, Sayads and Guráhs.
Tahsil Chiniot.	Kot Sultán	10	2,178	Bhattís.
	Núrpur Pípal ...	19	8,330	Sangras, Chaddhars, Sayads, Bhattís and Khokhars.
	Baráná	8	3,735	Sámbhals and Bhattís.
	Thatti Bálárája ...	7	3,774	Sayads, Khatrís, Sámbhals and Kharals.
	Lalián	7	3,352	Sayads and Lálís.
	Do.	7	6,345	Kalas, Lálís, Chaddhars, Khokhars and Harals.

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Village officers.

Tahsil.	Zail.	No. of villages.	Annual land revenue.	Prevailing caste or tribe.
			Rs.	
Tahsil Chiniot—*concluded.*	Lalián	11	2,876	Lálís, Khatrís, Khojás and Khokhars.
	Kharkin	15	5,658	Harals, Sayads and Khatrís.
	Kot Amír Sháh ...	22	4,723	Sayads, Nekokáras, Nissoánas, Siprás and Lolás.
	Kándíwál	16	4,348	Nissoánas, Khatrís and Máraths.
	Langar Makhdúm ...	14	7,086	Gilotars, Gondals, Khatrís, Ríháns, Khojás, Nissoánas and Bhattís.
	Gadhlánwáli ...	14	6,236	Gilotars, Sargánas, Sayads, Harals and Nekokáras.
	Táhli Mangíní ...	7	7,010	Chaddhars, Sayads, Siprás and Khatrís.
	Bhoánáh	16	14,572	Jappas, Chaddhars, Rajokás and Siprás.
	Kurk Muhammadi...	13	5,460	Kharals, Khatrís, Sámbhals, Sajjanke, Kangars, Khokhars and Nitharkes.
	Rajoá	30	7,308	Sayads, Khatrís, Harals, Khokhars and Saláras.
	Chiniot	8	5,327	Khojás, Khatrís, Bráhmans, Kázís, Nekokáras and Sayads.
	Morádwála	22	4,476	Harals, Siprás and Khatrís.
	Kot Khuda Yár ...	20	3,708	Khokhars, Harals, Sayads and Arorás.
	Shekh Harse ...	9	3,087	Gújars, Harals, Sayads, Asís and Nekokáras.
Tahsil Shorkot.	Káim Bharwánah ...	7	2,509	Siáls and Bharwánahs.
	Sádik Nihang ...	8	6,525	Káthiás, Arorás, Siáls and Baloches.
	Alah Yár Jútá ...	12	7,125	Jútás, Kureshís, Nekokáras and Baloches.
	Badh Rajbána ...	8	8,910	Siáls, Rajbánas, Chaddhars, Kureshís and Sayads.
	Shorkot	6	6,007	Khatrís, Patháns, Jats and Siáls.
	Kakkíkohna ...	11	5,990	Káthiás, Siáls, Kureshís and Sayads.
	Kharánwála ...	9	6,625	Janjiánas, Surbánas and Baloches.
	Jalálpur	12	6,300	Kamlánas, Kureshís and Traggars.
	Dabkalán	14	7,541	Dabs, Sayads, Siáls, Káthiás and Hirájs.
	Kund Sargána ...	10	3,829	Sargánas, Chaddhars, Sayads and Nekokáras.
	Ahmadpur	9	9,063	Siáls, Sayads, Baloches and Arorás.
	Ranjít Kot	13	10,544	Kureshís, Siáls and Chaddhars.
	Sultán Báhú ...	8	3,926	Awáns, Bhidwáls, Sayads, Kureshís and Siáls.
	Garh Máhárája ...	18	6,507	Siáls and Baloches.
	Hassú Balel ...	20	9,670	Kureshís, Baloches, Siáls and Sayads.
	Uch	12	8,261	Sayads, Baloches, Arorás and Siáls.
	Haweli Bahádur Sháh	6	3,998	Kureshís, Siáls and Sayads.

Tenants and rent.

Table No. XVI shows the number of tenancy holdings and the gross area held under each of the main forms of tenancy as they stood in 1878-79, while Table No. XXI gives the current rent-rates of various kinds of land as returned in 1881-82. But the accuracy of both sets of figures is probably doubtful; indeed, it is impossible to state general rent-rates which shall even approximately represent the letting value of land throughout a whole district. The prevailing rent-rates, as ascertained at the Settlement of 1880, are shown at page 86. The figures on the next page show the cultivated area of the district distributed between proprietors, middlemen, and tenants by holdings and area. Similar figures arranged by castes have already been given in Section C of this Chapter (page 60).

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Tenants and rent.

Tahsil.	Class of cultivators.	Actuals.	Percentage.	Number of cultivators.
Chiniot.	Number of holdings	15,717	...	...
	Total acres cultivated	99,126	100·	14,054
	Cultivated by proprietors	42,560	43·	6,056
	Cultivated by *taraddadkàrs* ...	2,556	3·	333
	Cultivated by hereditary tenants ...	2,341	2·	483
	Cultivated by non-hereditary tenants	51,669	52·	7,182
Jhang.	Number of holdings	23,042	...	...
	Total acres cultivated	136,091	100·	19,836
	Cultivated by proprietors	6,273	46·	11,014
	Cultivated by *taraddadkàrs* ..	3,383	2·	390
	Cultivated by hereditary tenants ..	2,321	2·	440
	Cultivated by non-hereditary tenants	67,655	50·	7,992
Shorkot.	Number of holdings	11,132	. .	...
	Total acres cultivated	97,082	100·	11,293
	Cultivated by proprietors	43,023	44·	5,461
	Cultivated by *taraddadkàrs* ...	1,253	1·	145
	Cultivated by hereditary tenants ...	2,418	3·	335
	Cultivated by non-hereditary tenants	50,388	52·	5,352
District.	Number of holdings	49,891	...	...
	Total acres cultivated	332,299	100·	45,183
	Cultivated by proprietors	148,316	45·	22,531
	Cultivated by *taraddadkàrs* . .	7,191	2·	868
	Cultivated by hereditary tenants . .	7,080	2·	1,258
	Cultivated by non-hereditary tenants	169,712	51·	20,526

More than half the cultivated area of the district is in the hands of the tenants-at-will, but it must be remembered that a considerable portion of the area thus shown is cultivated by co-sharers as tenants of the other proprietors. In some portions of the district, especially where property is held on ancestral shares, a couple of sharers, or even one, cultivate a well in which their share is very small, their shares in other wells being held by other sharers. The produce of the well so occupied is taken, and the revenue paid by the occupant alone. The ancestral shares are not acted on. The produce of the other wells jointly held is similarly taken, and the revenue paid by the occupant-sharers. Instances also exist where the revenue is paid according to shares, but each sharer takes the produce of the joint property he occupies without reference to the proprietary shares.

Occupancy tenants.

There is hardly anything to note about occupancy tenants beyond what has been written above. The area occupied by this class is very small, and except in the villages of the Kálowál *pargana* transferred to this district in 1861, they pay at much the same rates as tenants-at-will. The right is not much valued, and during the recent Settlement many occupancy tenants voluntarily abandoned their rights. In the Kálowál *iláka* the occupancy tenants generally pay the assessment, plus a *málikána*. Of this portion of the district Mr. Ousely writes:—

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"The heavy assessment of the Sikh times had quite trampled out proprietary rights, and artizans and village servants and proprietors all paid the Government revenue by an equal rate levied, generally speaking, on the number of ploughs supplied by each man. In these parts of the district cultivators of long standing were recorded as owners of the land in their occupancy, and they paid their revenue at the village revenue rates. They had of course no proprietary title in any of the village lands except what was in their actual possession as cultivators."

Tenants at-will.

The proprietors of the district cannot be congratulated on their tenants-at-will. Those of Chiniot are best off; though even there it is no easy matter to obtain tenants for Utár and Bár wells. It is never difficult to obtain tenants for the easily cultivated *sailàb* lands and the wells of the Hithár. There is, in fact, a competition for these lands in some portions of the district. But in the Bár, and especially in the Kachhi circles, the tenants are a poor unsettled class, with an indifferent reputation for industry. In the Kachhi this has been the normal condition of tenants for many years. Mr. Monckton wrote of them :—

"The non-hereditary cultivators are in no way attached to the soil; on the contrary, they are continually on the move, either from the well cultivation to the *sailàb*, or from bad to fertile soils. Even proprietors often quit their estates to join their brotherhoods in the Khángarh district to take to the easier cultivation near canals; or else they move off to the Kachcha of the Leiah district in seasons when the Indus may have fertilised by its deposit a tract larger than ordinary. Even the owners show but little attachment to their properties."

This is exactly what is still going on. Before the excellent rains of 1878, the Kachhi had been almost deserted by tenants-at-will, and the tract had seriously deteriorated. Many wells had fallen out of work, and many villages had been given large reductions in assessment. Since, the Kachhi has recovered in the most wonderful way, is still improving, and the tenants are coming back. But let another series of bad years come, and they will fly off in scores to the canals of Muzaffárgarh, the *sailàba* of the Indus, and the labour market of Mooltan. The tenant in the Bár tract is less migratory, but in seasons of scarcity he too deserts for the *sailàb* of the Rávi and the Mooltan canals. Almost all these tenants are in receipt of *takàvi* advances, and the position of a landlord of assessed land cultivated by such restless persons is not to be envied.

Takàvi advances.

In the upland villages a landlord, when he entertains a new tenant, almost always gives him an advance of money, or bullocks and seed to enable him to commence cultivating. These advances are known as *takàvi*. The money advances recorded at the recent Settlement are given below, with the number of holdings and other information :—

Tahsil.	Number of		*Takavi* advance.	Land held by tenants.			
	Holdings.	Tenants.		Cultivated.	Fallow.	Uncultivated.	Total.
Chiniot	361	416	15,370	2,785	480	869	4,134
Jhang	2,311	1,998	60,067	13,509	3,834	11,467	28,810
Shorkot . ..	1,210	1,552	35,529	12,449	4,891	15,441	32,781
District	3,882	3,966	1,11,866	28,743	9,205	27,777	65,725

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Takávi advances.

The amount of *takávi* here shown does not include any advances except of money. The landlord's theory with regard to these advances is that the tenant cannot leave his service until they are repaid. As a matter of fact, tenants very often do not pay, and leave on the slightest provocation. A bad season, the loss of bullocks, better terms offered by another landlord, are each a sufficient inducement to them to leave their old masters. If a tenant does leave, the proprietor has no remedy. It is not worth while suing him for the amount due, that would be simply sending good money after bad debts. What with the capital expended on wells, the money advanced in *takávi*, and the inferior quality of the tenantry, the cultivation of their lands is, for landlords of upland villages in this district, a most expensive undertaking. Of the area cultivated by tenants-at-will nearly one-half is held by Jats, one-sixth by *Kamíns*, one-eighth by Siáls, and one-sixteenth by miscellaneous Muhammadans. The large proportion held by *Kamíns* speaks volumes for the character of such cultivation.

Rent rates.

It remains to notice the shares upon which the produce of the land is divided between the proprietor and the tenant. The statement below will indicate how remarkably high the rent rate in this district is. The figures are taken from the Assessment Reports of the recent Settlement :—

Tahsíl.	Total area held on kind rents.	Area held by tenants paying half-produce with percentage on total area.	Average rent rate of the Tahsíl.
Chiniot ..	61,827	33,056 53	·43
Jhang ..	96,404	76,516 79	·47
Shorkot ..	57,791	53,831 93	·49
District ..	216,022	163,403	·46

More detailed figures are given in the table on the opposite page.

Probably there is not a district in the province where the rate of *batái* is so high. On *sailáb* lands the rate is invariably one-half. On the better class of *sailáb* lands in the Jhang tahsíl it is even customary to exact a small fee from the incoming tenant for permission to cultivate, and it is a well-known fact that throughout the district there is never any difficulty in procuring tenants for fairly good *sailáb* lands. On *sailáb* lands half *batái* does really mean half the produce after defraying the necessary *kamiána*, &c., charges. On well lands half-produce rents are nominal. With few exceptions one-third is the share of the produce taken by the landlord of *chína*, *kangni*, *mandua*, melons and tobacco. It is not customary for the three first-named crops to be grown together on the same well, but one or other is almost invariably cultivated. Melons, except near towns, belong entirely to the cultivator. Practically the tenant can cut as much green wheat and *jowár* to feed the well bullocks as is necessary. There is really no limit. Similarly the whole of the turnip crop is his. It is only where the crop or roots are sold that the proprietor takes his share ; otherwise all that he takes is a *marla* or two of

Classified abstract of Tenants' Holdings in the several Tahsíls, prepared at the Settlement of 1880.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Name of parganah.		*Tenants with rights of occupancy.*		*Tenants without rights of occupancy.*		Total of tenants paying in cash.	Total of tenants paying in kind.	Percentage of total cultivated area held by tenants.	MODE OF PAYMENT OF RENT FOUND TO EXIST.										
									In cash.		Rate of *Kamin's* fees per 100 maunds.	*In kind.*							
												Share of grain taken by proprietors, after deduction of *Kamin's* fees.							
		Cash rents.	Rents in kind.	Cash rents.	Rents in kind.				At Revenue rates only.	At a Revenue rate plus *Malikana.*		$\frac{1}{2}$	$\frac{7}{16}$	$\frac{2}{5}$	$\frac{3}{8}$	$\frac{1}{3}$	$\frac{1}{4} \times \frac{1}{2}$ Govt. demand.	$\frac{1}{4}$	Other rates.
Chiniot.	Holdings ...	251	400	127	9,058	378	9,458	56·8	126	252	19	5,075	184	164	100	3,561	284	82	8
	Area ...	1,155	3,262	1,029	58,565	2,184	61,627	59·4	661	1,523		33,056	1,208	1,418	741	21,591	3,322	448	43
Jhang.	Holdings ...	51	1,036	9	15,816	60	16,852	...	6	52	16	14,627	95	368	117	1,276	137	27	204
	Area ...	155	7,700	34	88,704	189	96,404	66·	29	155		76,516	525	2,035	867	12,852	1,371	199	2,044
Shorkot.	Holdings ...	4	416	...	6,228	4	6,644	...	...	4	17	6,265	106	...	48	42	115	58	10
	Area ...	11	4,219	...	53,572	11	57,791	55·7	...	11		53,831	1,412	...	623	408	877	538	102
District.	Holdings ...	306	1,852	136	31,102	442	32,954	...	132	308	17	25,967	385	532	265	4,879	536	167	222
	Area ...	1,321	15,181	1,063	2,00,841	2,384	2,16,022	...	690	1,689		1,63,403	3,145	3,450	2,231	34,851	5,570	1,185	2,189

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Village communities and tenures.

Rent rates.

green wheat and a bundle or two of turnips. Both *chína* and turnips are consequently very favourite crops with the tenant-at-will, and he half lives on turnips during the cold weather. On inferior wells, where the water is very distant or the soil not good, the tenant contrives under various pretences to extort other allowances. He insists upon one or two *marlás* being allowed him for his spiritual adviser (*pír*), and the same amount for his daughter's children, who are supposed to have certain claims upon him. On some wells the tenant gets one-eighth of the proprietor's half share, called *athog*. The word *athog* is now-a-days often used to mean allowances of this nature, though more or less than one-eighth. On others, instead of the *athog*, a *kanál* of the standing crop is allowed. The tenant takes care that this *kanál* is the very best on the well. *Jowár* and barley are specially liable to the pilfering attacks of the tenants. By the time *jowár* ripens the tenant's stock of grain is exhausted, and he commences to pluck the ears and scorch and eat the grain as soon as it is ready. The stalks are chewed as a kind of inferior sugarcane. When the *jowár* ripens and the grain is divided on the threshing floor, the tenant, by threats and entreaties, generally manages to cajole or swindle the proprietor out of his rightful share. The same course takes place in reference to barley. The tenant begins to pluck the ears long before he thinks of dividing the produce. The women walk through the fields and pinch off the ripest ears. The earliest and latest cotton-pickings belong to the tenant. If he reaps the wheat, he is paid the regular reaper's wage, contrary to the general custom in the Province. There are only two portions of the district where the prevailing rent rate is other than one-half the produce. In the Halkíwáh circle in Chiniot and in the Utár Vichanh circle of Jhang, the prevailing rate is one-third. In the Halkíwáh the comparative lowness of the rent-rate is due to the cultivation of the more profitable crops of sugarcane and Indian corn, that require more labour on the cultivator's part. In the Utár Vichanh it is due to the inferior quality of the soil and the difficulty with which cultivators are induced to take up tenancies on the wells. *Takávi* is just as common in the Utár Vichanh as elsewhere.

Landlord's right to *bhúsa*.

There is a considerable amount of ferment in the Jhang tahsíl where Kirár landlords are more common than elsewhere, regarding the question of dividing *bhúsa*. Of course in the case of a tenant-at-will the matter is one of agreement pure and simple. If the landlord wants a share of the *bhúsa* and the tenant refuses to give it, the landlord can eject, and if the converse is the case, the tenant can give notice. The importance of the question lies in its relation to *taalukdár* proprietors and hereditary tenants. On *sailáb* and well lands, before the recent Settlement commenced, no fixed share of wheat *bhúsa* was ever taken by any landlord throughout the district. If any exceptions existed (as they do to most rules), they were to be found in the Jhang tahsíl, and there were probably special circumstances (*e.g.*, very good soil and a grasping landlord, &c.) that explained each instance. All that the landlord took was two or three large bundles (*trangars*) per holding, if he wanted

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them. These loads of *bhùsa* were taken at various times, not necessarily at harvest. The demand was limited by the wants of the landlord. If he had enough *bhùsa* of his own, he probably took nothing from his tenant. On *sailàb* lands the landlord generally took *bhùsa*, but rarely on wells. It was left with the tenant on the tacit understanding that it was to be consumed on the well. It is more to the landlord's interest that the well bullocks should be well fed and strong, and that his tenant should be kept in a good humour, than that he should have seven or eight more maunds of fodder in his *bhùsa* stock. It is a condition of most annual leases in England that no straw is to be sold off the farm. *Missa bhùsa, i. e.*, that of *màsh, mung* and *moth*, is generally divided. Many instances will be found where the landlord never has taken his share of this *bhùsa;* but at the same time the landlord's right to take a share has never been really disputed, at any rate so far as concerns the general practice and feeling of the district. *Missa bhúsa* is exceptionally good fodder, and horses are very fond of it. Hence horse-breeding landlords usually took the same share of the *bhúsa* as they did of the grain.

Landlord's right to *bhúsa*.

Home farm cultivation is termed *hathràdh*, and a farm labourer *hathràdhì, ràhak*, or *kàma*. The *lichhàìn* tenant is not a farm labourer. A *lichhàìn* tenant is provided with a pair of bullocks by the proprietor, and takes half of the tenant's share of the produce allotted to his yoke, the other half being taken by the proprietor of the bullocks. Sometimes the *lichhàìn* finds half the seed, but more generally he gives nothing but his labour. A farm labourer is kept in clothes and shoes and tobacco. He gets a blanket in the cold weather. His ordinary clothes allowance is 1 loin cloth (*majhla*), 1 *chaddar* (*utla*), and 1 turban (*pag*). As to food, if the man is a bachelor, he gets his two meals a day, if married, he is allowed 4 *pài* of wheat or 5 *pài* of mixed grain,—*chìna*, barley, gram, and wheat per month. A farm labourer is also paid never less than 8 annas cash a month, often 12 annas or even more. He gets as much tobacco as he likes. The proprietor's barber trims his hair, and his clothes are washed by the proprietor's *dhobi*. These *Kàmàs* are as troublesome and grumble as much about their food as "men in the house" on an English farm. Keeping farm servants is very expensive during years of distress or high prices, and they do not at all sympathise with the proprietor's endeavours to economise by substituting *chìna* and other flour for that of wheat. But it is not customary to employ hired field-labourers, and they are very few in number, probably not more than one or one-and-a-half per cent. of the population. They are generally non-Jats who practice no craft, but get their living entirely in this way. As there is usually a considerable demand for labour, there is no fear of their starving if they will work; and so long as they are in employ they are well off. But the nature of their wages prevents their saving anything. They live better, that is, they have better food, than the poorer agriculturists who cultivate their own land, or the tenants-at-will paying *batài*. They are generally unmarried, and without encumbrances. Some further particulars regarding the employment and pay of agricultural labourers will be found in

Agricultural labourers and *lichhàìn* tenants.

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Chapter IV, page 120, where the division of crops is treated of. The wages of labour prevailing at different periods are shown in Table No. XXVII, but the figures refer to the labour market of towns rather than to that of villages.

Kamins' fees.

The *Kamìns* proper, *vadde Kamìn* as they are called, are the potter, the carpenter, the blacksmith, and the barber. The *mochi* and the *dhobi* are not included, as they are not always paid out of the grain heap. The fees of the *Kamìns* proper are usually partly fixed per well and partly proportionate to the well produce. A common mode of payment is one sheaf (*pùli*) + 1 bundle (*gadda*) + 2 *topàs* per *kharwàr*. A *pùli* contains about 8 *topàs* (15 seers) of grain, and a *gadda* is half the size. The barber is paid less than the other three. His allowance is often docked of the *gadda*. The carpenter generally obtains an additional fee of from 3 to 6 *topàs* per well on account of the sticks, (*arerìàn*) on which each well pot is strung, that he has to furnish. The *Chuhra* is another important *Kamìn*, but his fees are lumped as a winnowing fee (*hak chhajji*), and he is not included in the *vadde Kamìan*, *Kamìns* proper. There are also a number of miscellaneous fees. The weighman (*dharwàì*) gets from 2 *topàs* per *kharwàr* to half a *topà*. Two *topàs* are the usual fee. The watchman's (*muhassil*) fee is not universal. The tenant is supposed to be responsible for watch and ward, but the proprietor often finds it profitable to have his own watchman, and if he is appointed, his pay is defrayed from the joint heap. The fee varies from 2 *topàs* to 4 *topàs* per *kharwàr*. If 4 *topàs*, the fee becomes proprietary in character, for the landlord takes it and pays the *muhassil* what he thinks fit. *Bhàra* or *kiràya* (carriage fee) is another perquisite of the landlord. It represents the cost of delivering the grain at the landlord's house. Two *topàs* per *kharwàr* is the average rate, but both more and less is taken. With regard to both these last fees it should be noted that they depend on the relations subsisting between the tenant and the landlord. If the soil is good and the landlord liberal (there are landlords and landlords), the tenant does not object to his showing off by taking a heavy carriage and watchman's fee, but if the landlord is hard and the well not a very good one, both fees will be absent. The tenant often refuses to cultivate if a *muhassil* is appointed. The landlord has to gave way, and so indirectly recognises the right of the tenant to pilfer on a bad well. The priest (*mulla*) in charge of the village mosque (*masjid*), the boatman (*mallàh*), the well-sinker (*tobàh*), the herdsman (*chherú*), are also paid small fees from the grain heap. More rarely the village bard (*piràhì*, *miràsi*), the drummer (*nagàrchi*), the baker (*màchhi*), the proprietors agent (*naukar*), get fees. The religious and charitable fees are composed of the *rasúl arwàhì*, usually 1 *topa* per *kharwàr* taken by the *Mullah*, who looks after the spiritual welfare of the village. A small fee is often allowed in addition for the maintenances of the mosque. Almost invariably a payment, small in amount, is allowed for the support of the most favourite or nearest shrine. In some villages the allowances to shrines are considerable.

Religious and charitable fees.

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Kamìns' and other charges at the *kharìf.*

The allowances noted above are those paid at the wheat harvest. The *Kamìns* get very little at the *kharìf.* The *kharìf* crop on a well consists of cotton, *jowàr,* and *chìna.* If the grain crops are harvested and give a fair outturn, the *Kamìns* proper are given a little. There are certain nominal rates, but as a matter of fact, the *kharìf kamiàna* payments depend entirely on the outturn. If the *jowàr* and *chìna* fail, or yield but little grain, the *Kamìns* get no grain, but are allowed a little cotton instead. The *rabì* is by far the most important harvest, and it is the wheat crop that has to defray the *kamiàna* charges.

The incidence of the *kamiàna* charges on a well.

The *kamiàna* expenses on wells in this district are exceedingly heavy. It must be remembered that the maintenance of the well-gear and wood-work, the repairs to all agricultural implements, the supply of well pots, thatching charges, and house repairs, are all included in the *kamiàna.* Besides their legitimate work, the *Kamìns* have to make themselves useful in a multitude of ways. They plough if wanted, run errands, carry messages, cut wood and draw water. They are highly prized, and are well treated. It is a common saying among the people, that it is better for a lambardár to be congratulated on the fact that a fresh *Kamìn* has settled in his village, than that a son has been born to him. Any *Kamìn* settling in a new village would be given a house at once by the lambardár, or if there was not one available, a new one would be at once made, the lambardár supplying the wood and materials. Village servants they are, and occasionally have to endure rough treatment and hardships, but they are a far too valuable element in the village community for the lambardár or proprietors to oppress them in any extraordinary manner. They also get, in addition to grain fees, bundles of fodder from the wells in season. Most of them keep a cow or a small flock of sheep and goats. It is a mistake to suppose, as is often done, that they are a miserable, down-trodden, poverty-stricken set of men.*

Petty village grantees.

The last two lines of Table No. XXXIV of the Revenue Administration Report show that there are no persons holding service grants from the village held free of revenue. But even if this be the case, this is by no means the only form which these grants assume. Sometime the land is leased to the grantee at a favourable rent, or on condition of payment of revenue only; sometimes the owner cultivates and pays the revenue, making over a portion or even the whole of the produce to the grantee; while occasionally the grant consists of the rights of property in the land, which, subject to the usual incidents, such as responsibility for revenue and the like, vest in the person performing certain specified services at such time and for so long as he performs them. These grants are most commonly made to attendants at temples, mosques, shrines, so long as they perform the duties of the post, and for maintenance of monasteries, holy men,

* Appendix 8 to Mr. Steedman's Settlement Report shows the *kamiàna* fees in a river and an upland village in Shorkot. They amount to 23·2 and 20·0 per cent. of the gross produce respectively.

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Poverty or wealth of the proprietors.

teachers at religious schools, and the like. The fees paid for these purposes have been noticed above, together with *Kamín's* dues, at pages 90 and 91.

Table No. XXXII gives statistics of sales and mortgages of land; Tables Nos. XXXIII and XXXIIIA show the operations of the Registration Department; and Table No. XXXIX the extent of civil litigation. But the statistics of transfers of land are exceedingly imperfect; the prices quoted are very generally fictitious; and any figures which we possess afford but little real indication of the economical position of the landholders of the district. The subject is discussed at some length at pages 493 *ff* of the Famine Report of 1879, where actual figures are given for instances selected as typical. In forwarding those figures, the Settlement Officer wrote as follows:—

"I believe that from 40 to 50 per cent. of owners and 60 to 70 per cent. of tenants-at-will are in debt. There are very few occupancy tenants in this district. I am of opinion that in the case of owners their average indebtedness is about 25 per cent. of their income, and in the case of tenants 50 per cent. Owner's debts are usually due to improvident expenditure on marriages and funerals, or to failures of harvest. What keeps the debt from being paid off is the ruinous rate of interest charged. An ordinary zamíndár always, or almost always, lives up to his income. A harvest fails, and he has to borrow money to support himself and pay the revenue. The important harvest in this district is the *rabí*. If the *rabí* is a failure, the proprietor will not be able to pay off any, or only very little, of the debt until the following *rabí*. Meanwhile the debt has increased by one quarter, at 25 per cent. per annum interest. This is how the zamíndár gets into debt, and hardly ever gets out of it. Another fruitful cause of debt is the expenditure attendant on a civil case. Another, the payment of fines imposed in criminal cases. The people of this district are notorious cattle thieves. Hospitality and charity ruin a few. It is instructive to consider the indebtedness of the different tribes. There is only one Sayad in the whole district who is out of debt. The Siàls in the Shorkot tahsíl are generally in debt; in Jhang many Siáls are well-to-do, prosperous agriculturists, and the proportion of the tribe that is involved in debt is comparatively small. Hindú cultivators are seldom in debt. Jats are, as a class, not very much in debt. Most will be slightly in debt, but the amount will be small. It is a common practice here for a zamíndàr to mortgage his well and build another with the money. Tenants-at-will are, as a rule, only indebted to the amount of *takávi*, or advance which they receive from the landlord. In fact, no *banià* would lend them anything, for they can give no security for it. The only property worth attachment is their share of the produce, and this is an uncertain and fluctuating quantity. At times persons of this class are put to great straits for their livelihood, for if the harvest is a failure, they have nothing to fall back upon. *Takávi* advances which they obtain from the landlord, vary in amount from Rs. 10 to Rs. 75, and the tenant is supposed not to leave until he has repaid the advance; but he often does leave without repaying. The instances of agriculturists, which I submit in tabular form, are few; but I had great difficulty in obtaining these few. The first is a good instance of a small proprietor cultivating his own land. The second is an instance of a prosperous zamíndár cultivating a first class well. The third is an instance of a well-to-do tenant, and the fourth of

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an impoverished tenant-at-will. It is hardly possible to show in the statement to what extent a poor cultivator supports himself on turnips, carrots, and various herbs called *ság*. During the hot weather the fruit of the *ber* tree and the *pílú* bush largely supplement his daily food. In some portions of the district he lives chiefly on milk. As a rule, tenants-at-will live a hand-to-mouth existence; the produce of one harvest barely enabling them to subsist until the next."

Transfers of land: their origin, and the lesson they teach.

The statement below gives statistics collected at the recent Settlement regarding the extent to which transfers of land have taken place in the district :—

SALES.

Tahsil.	Details. Period.	Transfers.	Area. Cultivated.	Area. Uncultivated.	Area. Total.	Price.	Jama.	Incidence. Per acre.			Incidence. Per rupee of Jama.		
						Rs.	Rs.	Rs.	A	P	Rs.	A	P
Chiniot.	Before 1856	..	..	..	..	..	..	..	..	..	..	..	..
	Since „ ..	128	1,632	1,861	3,493	39,518	992	11	5	0	39	13	5
Jhang.	Before 1856	829	13,786	17,527	31,313	1,04,346	11,861	3	5	4	8	12	9
	Since „ ..	1,168	10,374	12,803	23,177	3,00,238	7,933	12	15	3	37	13	7
Shorkot.	Before 1856	..	..	..	..	..	..	..	..	..	..	..	..
	Since „ ..	630	5,229	8,418	13,647	1,49,171	4,115	10	14	11	36	4	0
District.	Before 1856	829	13,786	17,527	31,313	1,04,346	11,861	3	5	4	8	12	9
	Since „ ..	1,926	17,235	23,082	40,317	4,88,927	13,040	12	2	0	37	7	10

MORTGAGES.

Tahsil.	Details. Period.	Transfers.	Area. Cultivated.	Area. Uncultivated.	Area. Total	Price.	Jama.	Incidence. Per acre.			Incidence. Per rupee of Jama.		
						Rs.	Rs.	Rs.	A	P	Rs.	A	P
Chiniot.	Before 1856	257	2,347	2,705	5,052	44,753	1,396	8	13	9	21	6	7
	Since „ ..	388	4,350	4,494	8,844	71,751	3,351	8	1	10	22	3	3
Jhang.	Before 1856	2,482	27,529	24,913	52,442	2,63,770	23,848	5	0	6	11	2	0
	Since „ ..	2,585	16,882	16,443	33,325	4,57,259	12,616	13	11	6	36	3	11
Shorkot.	Before 1856	630	4,045	5,981	10,026	92,804	4,028	9	4	1	23	0	8
	Since „ ..	958	7,452	8,023	15,475	2,08,726	6,532	13	7	10	31	15	3
District.	Before 1856	3,369	33,921	33,599	67,520	401,328	29,771	5	15	1	13	7	8
	Since „ ..	3,931	28,684	28,960	57,644	7,37,737	22,499	12	12	9	32	12	7

On these figures Mr. Steedman makes the following instructive remarks, which describe the degree of indebtedness of the Jhang

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Transfers of land: their origin, and the lesson they teach.

landowners, and the reasons which, in Mr. Steedman's opinion, have caused that indebtedness :—

"According to the figures of the sale statement, the price land has been fetching on the average during the last twenty years is about 38 years' purchase of the rent taken by Government. The two statements convey two pieces of information: 1st, the extent to which land has changed hands, and is encumbered; 2nd, what a purchaser or mortgagee has given for the privilege of taking the proprietary share of the produce and paying one rupee of the Government demand. From these facts conclusions can be drawn as to the pressure of the Government demand. It is easy to grasp the fact that so many acres of land assessed at so much revenue have been transferred, and to infer that the owners of the land must have been compelled through want of cash to consent to the transfer. Whether the pecuniary difficulties that gave rise to the transfer were the result of the land assessment or not, is quite a different matter. If it were a generally true proposition that the indebtedness of agricultural classes is due to the pressure of the land revenue, one would expect to find the most transfers and the heaviest encumbrances in villages where the demand is highest, and the smallest number in good villages assessed lightly. But, as a matter of fact, when one descends into details, experience teaches that good villages lightly assessed are most burdened with debt. We have not to go far for the reason: zamíndárs are thievish, generally quarrelsome, and always litigious. The *jama* is light and the land is good. The bankers are only too willing to lend money on such excellent security. Their morals are not shocked, whether the creditor spends it in paying fines imposed by a magistrate, or defraying the costs of a civil suit, or squanders it in debauchery. They know the land is fertile, and that the revenue dues chargeable to the proprietary share are light. It may be objected that it is unfair to generalise from a few instances furnished by individual villages. Let us therefore take the different circles as units. Here again it will be at once discovered that the richest circles furnish the most mortgages. Yet it may be said that the best lands are the most heavily assessed. Undoubtedly, but the surplus produce after payment of the land revenue is always much larger than in the case of poor villages. The extra few annas an acre that are imposed on good villages, as compared with poorer villages in the same circles, do not nearly represent the difference in the returns from the two classes of villages. It is so both in theory and in practice. The Government assessment being equal, as I estimate, to $\frac{1}{10}$th share of the produce, then where the assessment is high the amount of the remaining $\frac{9}{10}$ will be greater than where it is low. I have already noted the tendency of modern assessments to let off good villages too lightly and tax bad ones too heavily. Why the demand for mortgages of the best lands should be most effective, is clear enough; but why should the proprietors of these lands be obliged to mortgage their property? How is the necessity brought about? What often does take place is this. When the owner of a good well or a fat piece of *sailà* deals with a *baniáh* who is anxious to hold some land in mortgage, he finds that his credit is unlimited. It is a case of spending made easy. He can have whatever he wants whenever he wishes. All that he is troubled with is his signature or assent to the usual six monthly statement of accounts, and at harvest time he will make a few payments to the *baniáh* in grain. This goes on for 4 or 5 years, or often longer. Then the demeanour of the creditor changes. He insists upon a registered bond

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for the amount due or a mortgage. The debtor temporises as long as he can, perhaps transfers his account to another shop, often takes his chance of a law suit, trusting in his luck to evade some of the items. All these devices fail, and he makes over a share in his property on a verbal *lekha mukhì* contract to his creditor. This is probably the very worst thing he could do. A *lekha mukhìdàr* is as hardly displaced as was the old man of the sea. The zamíndár never goes into the account, and is fleeced in every possible way. Instead of growing less the debt grows larger, and a mortgage is at last gained. I have already explained the status of a mortgagee. He steps into the proprietor's place, takes the proprietary share of the produce, *hak bhutàri*, and pays the revenue, some small fee in kind only being retained by the mortgagor to mark his rights. The fact, therefore, that the lands of any village or circle are heavily mortgaged is no reason for lowering the assessment. To reduce the Government demand is to put so much more money in the mortgagee's pockets. On the contrary the existence of a large number of mortgages, the incidence of the mortgage money per cultivated acre and per rupee of *jama* being high, denotes a large surplus left to the mortgagees out of the proprietor's share of the produce after payment of the Government dues, and warrants a high assessment. It may be urged, where only a portion of a zamíndár's land is mortgaged, that it will be the easier for him to redeem, the lighter the assessment is pitched. Mortgages are sometimes paid off, it is true, but not many, and the amount of land mortgaged is increasing so steadily that it is impossible to act upon such an argument.

Are the agriculturists becoming expropriated?

"As far as this district is concerned, there is, as far as my experience and the statement of sales go, nothing to show that the original proprietors are being rapidly expropriated. I should say that sales to *banidhs* pure and simple are few. The policy and class sympathies of Sáwan Mal resulted in the acquisition by Hindús of large properties in virtue of purchase, mortgage, direct grant, and *hàthrakhàì*. Many of these men have now given up trading, but many also practise their original calling in addition to managing their landed property. These are the chief purchasers of land. That land is highly valued is shown by the statements, and how rapidly it is increasing in value is a matter of daily conversation, a still surer test.

Indebtedness of the agricultural classes, its causes and aspects.

"The zamíndárs in Chiniot are most free from debt, and those of Jhang the most embarrassed. Shorkot holds an intermediate position. In the Settlement Records 11½ lakhs of mortgage and 1½ lakhs of *lekha mukhì* are recorded. To charge the old assessment with being the author of all this indebtedness is, I cannot phrase it otherwise, sheer nonsense. Consider for a moment what the incidences per acre of cultivation and per well of the old assessments were, the increase that has been taken by the new assessments and their incidence. Remember the great rise that has taken place in the price of agricultural produce, and the infinitely greater luxury and comfort enjoyed by all agriculturists except the lowest, as compared with their condition at annexation. Our system of revenue collection is to some extent answerable for agricultural debt, but the real and true cause of all our woe was the mistaken and misplaced gift of full transferable proprietary right in land to the cultivator, and with it of a vast credit only limited by the value of that proprietary right. It is only of late that there has been an awakening to the true facts of the case, but that the cause stated is the true one, I have not the slightest doubt. The thrifty and unembarrassed zamíndárs of this district can be counted up on one's

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Village communities and tenures.

Indebtedness of the agricultural classes, its causes and aspects.

fingers. So long as a zamíndár has credit, so long will he borrow, and so long as he borrows, shall we find our annual returns of land transfers slowly but surely and steadily increasing. The sole basis of his credit is his transferable property in the land. Take this away, and all the security that the money-lender has is the annual outturn of the crops. In such case we should not hear of zamíndárs being thousands of rupees in debt. Their credit would shrink, and their debts too. There are numbers of villages along-side the Bár, east of Kot Isa Sháh, in which there is hardly a single mortgage. Why? Because cultivation is uncertain, and the mortgagee might find the mortgaged well abandoned in a few months, and himself left saddled with the revenue. It is not good enough. Here the zamíndárs have no credit, and they are not in debt, except to a small amount. You do not find tenants-at-will over head-and-ears in debt. They are in debt, it is true, but the limit is the amount that the *baniáh* considers is pretty certain to be repaid to him at the next harvest. That the conferment of proprietary right in the soil has really benefited the zamíndár I sincerely doubt. To have twice as many wives as before, to eat better food, to be better clothed and housed, to ride a nag where he went formerly on foot, are outward signs of improvement and civilisation; but when we remember that all this is accompanied by debt (there is hardly a Muhammadan landowner in the district who is not in debt), and that this debt is steadily increasing, how is it possible to be satisfied with things as they are? If a man draws a large prize in a lottery and follows it up by plunging into extravagances and adopting a style of living that is far beyond his income, we do not say that he is advancing in the path of civilisation and steadily improving his condition. He is called a reckless prodigal, and it is universally predicted that he will go to the dogs in the shortest of periods. Had rights of occupancy only been given to the cultivators, and all transfers, except such as the State sanctioned, absolutely prohibited, there certainly would not have been anything like the amount of indebtedness that we now find, and I have little doubt that the Government would have been able to have largely increased the land revenue. After 30 years, we are just beginning to take about as much as the Sikhs took on a very much smaller cultivated area. Why we cannot take more is exemplified in the mortgage statement. There are mortgages in the district to the amount of 11½ lakhs, and of course an enormous quantity of unsecured debt besides. The interest on the unsecured debt all goes out of the agriculturist's pocket, out of the produce of his land. I suppose there are but few villages in which the annual interest on debt does not exceed the Government demand. So far the agricultural community is impoverished and less able to pay a fair rent to Government. As our Government has made it possible for the zamíndár to raise money, so has the money-lender made it difficult for him to free himself when once in debt, by charging an extortionate rate of interest. Here, as elsewere, 24 per cent. per annum is the rate charged. With this rate and compound interest a debt doubles in three years. No wonder the wretched, foolish Jat never manages to extricate himself. He is sucked dry, and then allowed to drop out of the meshes."

CHAPTER IV.

PRODUCTION AND DISTRIBUTION.

SECTION A.—AGRICULTURE AND ARBORICULTURE.

Chapter IV, A.

Agriculture & Arboriculture.

General statistics of agriculture.

Table No. XIV gives general figures for cultivation and irrigation, and for Government waste land; while the rainfall is shown in Tables Nos. III and IIIA and B. Table No. XVII shows statistics of Government estates, Table No. XX gives the areas under the principal staples, and Table No. XXI the average yield of each. Statistics of live-stock will be found in Table No. XXII. Further statistics are given under their various headings in the subsequent paragraphs of this chapter. Land tenures, tenants, and rent, and the employment of field labour, have already been noticed in Chapter III, Section D.

How far the agriculture of the district is dependent on rain. The effectof heavy and light rains.

With the exception of a little *bàrdni*, rainland, cultivation in the northern half of the Chiniot tahsíl, agriculture is in the Jhang district confined to lands either naturally moistened by inundation or percolation from the Chenáb, Jhelam and Rávi rivers, or artificially irrigated from wells by means of the Persian wheel. No other system of lifting well water is known in this district. It must not however be supposed, because there is, so to speak, *no* cultivation that depends solely upon rain, that it is a matter of indifference whether the country gets rain or not. *Sailàb* lands of good quality, if well wetted during July and August, require wonderfully little rain, but *without* rain the crops are never good. To crops on light and sandy *sailàb* lands, no rain means destruction. The crop looks very well up to the latter half of February, and then the dryness of the Jhang climate soon makes itself felt. If the crop does not dry up, the ears will be small and stunted, and contain only a few shrivelled grains. It is not so much heavy rain as rain in season that is needed.* The outturn of all crops on well and *sailàb* lands is best in years of moderate rainfall. This is not the same as saying that the district does best in years of moderate rainfall. For the public welfare Jhang could not have too much rain. Heavy rain means heavy grass crops, and it is far more important in a district where almost every one high and low owns cattle, that there should be good grazing, than that the crop outturn should be heavy. In the Dera Ismáil Khán Thal the case is much the same.

* For a remarkable instance of how little rain is required to ensure a good yield, if only it comes at the proper time, and how much more important the *season* of the fall is than its *amount*, see paragraph 91 of Mr. Steedman's Settlement Report.

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From a grazing point of view the Thal cannot have too much rain, but the Thal well-owners will tell you that too much rain is very injurious to their wells, and diminishes the crop yield materially. To sum up, for a good crop and a heavy outturn an average rainfull judiciously arranged is best; but for the general wellbeing, the more rain the better, the months during which the *kharíf* and *rabí* crops ripen and are harvested being excepted.

Cultivated and irrigated area of the district.

The cultivated area of the district, in acres, is arranged below, with the number of wells that were at work at the recent Settlement :—

Wells.	*Cháhi.*	*Sailába.*	*Bárání.*
11,018	227,299	98,748	3,480
Percentage.	69·. . .	30·	1·

The statement below shows the irrigated area ascertained at the same time :—

ABSTRACT SHOWING THE IRRIGATED AND UNIRRIGATED SOILS IN EACH TAHSIL.

Number.	Tahsíl.	Cultivated. Irrigated. Cháhi Khális.	Cháhi Sailab.	Cháhi Jhalári.	Cháhi Naihri.	Jhalári.	Naihri.	Total.
1	Chiniot ...	72,543	1,100	110	..	...	...	73,753
2	Jhang	91,100	7,243	498	.	1,397	...	100,238
3	Shorkot	42,858	10,639	438	605	1,444	395	56,379
	Total ..	206,501	18,982	1,046	605	2,841	395	230,370

Number.	Tahsíl.	Cultivated. Unirrigated. Sailáb.	Bárání	Total.	Total cultivated area.	Abandoned and Appar.	Total cultivated and fallow area.
1	Chiniot ...	22,367	3,006	25,373	99,126	20,844	119,970
2	Jhang ...	35,517	336	35,853	136,091	29,235	165,326
3	Shorkot ..	41,038	173	41,211	97,590	22,155	119,745
	Total ...	98,922	3,515	102,437	332,807	72,234	405,041

NOTE.—This statement includes the area of revenue assignments.

In *cháhi* is included all areas artificially irrigated, whether by canal, *jhalár*, or well. *Naihri*, or inundation canal cultivation,

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differs but little from *sailáb*; but the means of irrigation are not natural, and therefore it is here classed with *cháhi*. The different methods of agriculture from wells and *jhaláŕs*, on *sailába* and *naihrí*, and on *báráni* lands, will now be discussed.

Irrigation.

Table No. XIV gives details of irrigation. Further information will be found at pages 177 to 203 of Major Wace's Famine Report, compiled in 1878. At that time ½ per cent. of the cultivation was irrigated from canals, 68½ per cent. from wells, 30 per cent. was flooded, and the remaining 1 per cent. was wholly dependent upon rain. The following figures show the number of wells then existing in the district, with certain statistics regarding them :—

Number of wells.	Depth to water in feet.		Cost in rupees.		Bullocks per wheel or bucket.		Cost of gear.	Acres irrigated per wheel or bucket.	
	From	To	Masonry	Without Masonry	Number of pairs.	Cost in rupees		Spring.	Autumn.
7,052	..	20	185	25	3	102	38	15	7
3,220	20	30	250		4	160	40	16	7
595	30	40	350	..	4½	200	45	15	6

Of these wells only 40 were unbricked, while all were worked by the Persian wheel. The wells in the upland circles of the Chiniot tahsíl are deeper than in any other part of the district. The wells in the villages fringing the river bank are usually less than 20 feet deep; those in the villages beyond are, in the northern half of the district, from 15 to 25 feet; and those in the villages lying underneath the Bár, both in the Chaj and the Rachna Doábs, are usually 30 feet or over. As the Rávi is approached, the depth of the wells sensibly decreases. Speaking generally, the wells in the villages under the Bár may be said to diminish in depth from the boundary of the Shorkot tahsíl southwards. On the west of the Jhelam the wells in villages lying between the Thal of the Sind Ságar Doáb and the riverain villages are slightly over 20 feet in depth, whether near the Thal or near the river.

Wells.

In Jhang, wells are *pakka* where the cylinder is made of burnt bricks cemented by mud, and *kachcha* where the well is merely a hole in the ground, or where the hole is lined with a cylinder of wattles or stakes. A *kachcha* well without any lining or with a wattle lining is termed *kharora*. These are most common. A *kachcha* well lined with stakes arranged in a circle and banded together is not met with often, and is called *kathiál* or *gandiál*. A *jhaláŕ* is the name given to a Persian wheel when set to work on the edge of a *nála*, stream or pond. The best *jhaláŕs* are those where the pit from which the water is drawn is a short distance, a few yards, away from the edge of the stream or pond. The pit is rectangular, with an inward slope, and the lowest portion is sometimes lined with bricks. This reservoir in which the water pots revolve is connected with the stream or pond by a narrow channel open at the top. In Maghiána some of these channels are lined with brick. Usually the the *jhaláŕ* pits and connecting channels are

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Wells.

constructed in the roughest manner. In the case of other *jhalàrs* the well pots dip into the stream or pond itself. Here there is no pit, but the sides of the bank have to be faced off and strengthened, over which the well pots and vertical wheel hang. *Pakka* wells are divided into double wheeled and single wheeled. There is no difference in the building, except that one is larger than the other. Mortar is hardly ever used to cement the brick work of a *pakka* well. It is supposed to altogether spoil the water for drinking purposes, and to injure it for irrigation. A full description of the various parts of which a Persian wheel is composed will be found in paragraph 98 of Mr. Steedman's Settlement Report.

Well sinking. Masonry-wells.

The sinking of a *pakka* well is a business not unassociated with awe to the zamindár. First of all the services of a man wise in the finding of water must be obtained, and the site of the well determined at his direction. Next a small hole is dug in the ground, a libation of oil is poured into it, and *gùr* is distributed. Then the well hole is excavated to the water level. The well curb, *chak*, made of *kìkar* wood, is then let down by four ropes to the floor of the hole, and *gùr* is again distributed. The well cylinder is built up on the curb to a height sufficient to take it down to the required depth. Around the top is constructed a platform with containing walls of *kàna* and *sar bands*, wound round and round and kept in place by pegs. All the sand that is dredged out of the well is packed on to this platform, and its weight serves to sink the well. It is not thrown aside until the well has been sunk as far as it is to go. The upper three or four feet of the brick cylinder are also strengthened by being wound round with *kàna bands*. This may be dispensed with if water is near, and the well only a small one. A well is sunk down to the stratum that is called the *sach*. In this district the true *sach* is a stratum of coarse sand of a reddish colour. If this stratum is not found, everything that is bad happens to the well. The water is dirty and the supply deficient. Holes form under the *chak*. At first the well only sinks, but finally the brick-work cracks or falls in. The *sach* of wells on the Chenáb is good, though there are exceptions. On the Jhelam it is inferior. The definition of *sach* is not easy, but it apparently means a good water-bearing stratum of pure sand through which water springs or percolates regularly and rapidly into the well. When the diver asserts that the *sach* has been reached, the water-supply is at once tested by borrowing seven or eight pairs of bullocks and working the well for two days as hard as it can go. If the water level in the well is thereby only a few inches lowered, the water-supply is good, The *sach* having been reached, the well is worked for about a week to further test the water-bearing capacity of the stratum, and if everything is satisfactory, the platform is taken off and the sand thrown down round the well. Where the *sach* is good, the well scarcely ever requires cleaning. All that has to be done is to pick out the well pots and fragments that tumble in from time to time; whereas with a bad or no *sach* the well requires constant attention. Sand and mud accumulate inside, and have to be removed, and the well has to be stopped because there is no water. When the brick

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work cracks or falls in, the well is rendered serviceable by sinking inside a small wood cylinder called *chak, kothí, bachchi, chaubachcha.* Sometimes the crack is patched up, but this is not usual. A *kachcha* well is only sunk down low enough to ensure a good supply of water. They are not renewed or repaired, but have to be cleaned out. The water in a *kachcha* well is never clear. A well with a wattle cylinder lasts about six years, one with a stake cylinder about fifteen years.

Kachcha wells.

On this point Mr. Steedman writes:—

Cost of a well.

"The question—'What does it cost to sink a well?' must be answered just as the question—'What is the area a well can irrigate?' by—'It depends.' I have heard of wells close by the river where water is within a few feet of the surface, having to be sunk 20 and 30 feet before the desired *sach* was found. Here you have wells where the depth of water in the wells is twice as great or more than the distance from water level to the surface of the ground. Three years ago I sunk a well in my garden in the zamíndár's fashion, pouring out oil, distributing *gúr* in the orthodox mode, and it cost me Rs. 250. The well is 20 feet to water and 7½ feet under water. The *sach* is excellent, and there were no hitches in the work. To a zamíndár the cost of constructing a well is not much. The well hole is dug out, the bricks made, burnt, and carried by the *Kamíns.* Fuel is supplied by the village waste and his cotton fields. The bricklayers' and divers' work is the only heavy charge. All the labour of spreading the sand, pulling up the dredge, &c., is performed by the *Kamíns*, and they get nothing but a meal a day. I do not think I am far wrong in putting the cost of a well to a zamíndár at half what it would cost a non-proprietor. I estimate that a well 20 feet deep will cost Rs. 200, one 30 feet deep Rs. 300, and one 40 feet deep Rs. 450."

The system of distributing well water.

The people have most various modes of dividing the water of a well. So many *pàhrs* of three hours each are allotted to each share, and after a fixed period the times of the *pàhrs* are changed. If the well is held on three-thirds, and four consecutive *pàhrs* are allotted to each third, then the yoking times change of themselves, *e. g.*, *A*, *B* and *C* hold a well, and each works the well for four *pàhrs.* *A's* turn at the well, if from midnight to midday on Monday, will be from midday to midnight on Tuesday. Similarly, if a two *pàhrs* turn is allowed to each proprietor of one-sixth, the time of each turn changes in regular order. If, however, the turn is of two *pàhrs* for each quarter in the well, then the change has to be made artificially. The change when made gives the two night turns to the proprietors who before had the day turns, and they again arrange between themselves to take in alternate weeks the first or second turn. Turns are called *vàrìs.* They are always calculated on *pàhrs* of three hours each. A *vàri* is never less than two *pàhrs* or six hours, and never more than eight *pàhrs* or 24 hours. A pair of bullocks works six hours at a stretch. There is no difference between the system of *vàrìs* in the Hithár and Utár, on shallow and deep wells. *Vàrís* always correspond to the proprietary shares in the well, or to the proprietary shares represented by the amount of land held by the tenants. A one-third sharer in a well will not get an extra long *vàri*, because he possesses an extra pair of bullocks.

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What area does a well irrigate.

The areas irrigated by wells in different parts of the district differ considerably. The area usually irrigated by a full yoked well *assisted by sailáb* is much the same all over the district—about 30 acres. The area irrigated by a well and *jhalár* varies too much to allow of any good estimate being made. The time that the *jhalár* can be worked is uncertain. In forming an idea of what area is on the average irrigated by unassisted wells, the first thing to be done is to banish any preconceived opinions that this area varies inversely to the depth to water in the well. As a matter of fact, the areas irrigated by the deep wells of the Chiniot tahsíl in the uplands between the Kirána Bár and the river have the largest areas under annual cultivation of any in the district. In the Shorkot Utár lands lying under the Bár, the depth to water is two-thirds of what it is in Chiniot, yet the areas irrigated are hardly half those of the Chiniot wells. Much more depends upon the quality of the soil, the number and power of the bullocks, the rainfall, the industry of the cultivator, and the nature of the crops grown, than on the distance that the water has to be lifted. The following is Mr. Steedman's estimate in acres of the areas irrigated by unassisted wells in the various parts of the district:—

Chiniot uplands.		Jhang uplands.			Shorkot uplands.
East of Chenab.	West of Chenab.	Between Chenab and Chaj Bar.	Along Jhelam.	Between Chenab and Sandal Bar.	
30	26	24	20	17	15

The following statement gives the average areas attached to each well, including fallow, in acres, as ascertained at the recent Settlement:—

Tahsil.		Circle.			
		Centre.	Bár.	Utar.	Kachhi.
Chiniot		26·5	26	30	..
Jhang ..	Jhelam..	20·7	..	..	15·5
	Chenáb..	16·5	16·8	24·5	..
Shorkot		15·0	15·4	..	15·8

Kachcha wells are only found in the Hithár near the rivers. Their irrigating power is about one-fifth less than that of masonry wells in similar situations. They are liable to dry up. The area watered by a *jhalár* in a given time must be half as much again as that by a well. The water pots (they might be called *lotás*) are quite twice the size of those used on wells, and the wheel on which they are strung revolves quite as fast as the wheel on any ordinary well. Besides the greater quantity of water delivered, the zamíndárs say that the change of water itself is a benefit to the soil. The only disadvantage appears to be a larger wastage than that which takes place in the case of wells. Where a well is assisted by a *jhalár*, the lands attached will be almost always farmed well. A slovenly cultivator does not trouble himself to set up a *jhalár*.

Rotation of crops. System of agriculture on well lands.

On the upland unassisted wells of this district there is no system of agriculture that can properly be called rotation of crops.

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Rotation of crops. System of agriculture on well lands.

The two main points to be kept in mind are—1*st*, that on a well the area under spring crops is usually from 70 to 75 per cent. of the area annually cultivated, and that three-fourths of the spring crops are wheat and barley ; 2*nd*, that owing to the intense heat and dryness of the climate during the hot months and scanty rainfall, the land put under autumn crops is chosen near to the well, in order that the loss by evaporation may be the least possible. The difference between the irrigating power of a well in the hot and cold weather is enormous. The proportion between the area under *kharîf* and *rabì* crops indicates this. Crops that require to be liberally manured are always cultivated close round the well. The area under crop varies greatly from year to year. All other things being equal (*i. e.*, the number of tenants and well bullocks), the disturbing element is the rainfall. For the autumn harvest it is the *jowàr* crop area that contracts or expands. The cotton sowings are made long before the summer rains, and are not affected thereby. Even if good rain fell just before the time for sowing cotton, it is doubtful whether a larger area would be sown. The cultivator knows what hard work it often is in May, June, and the first half of July to keep the cotton alive, and will rarely be tempted to sow a larger than the average area. With *jowàr* the case is different. If there is good rain in July, *jowàr* will be sown without irrigating the land, with the knowledge that it will germinate, and the hope that rains to come will, with the aid of a couple or so of waterings about September, bring the crop to maturity. Such *jowàr* is additional to the area usually cropped, and has to take its chance. If the later rains fail, then this *jowàr* will be abandoned. The well can only irrigate the ordinary cotton, *jowàr* and *chìna* area. Before the wheat sowings the turnips have to be sown. If there is rain in September and October, the area under wheat will be above the average. The hypothetical well has of course a total attached area larger than the area annually under crop by at least two-thirds, so that there is no practical limit to the cultivation besides the known irrigating power of the well and the scantiness and uncertainty of the rainfall. If, therefore, the rainfall in September and October is exceptional, there is nothing to prevent the cultivator from putting under wheat twice as much land as usual. As a matter of fact, in the most favourable years the area sown with wheat will never exceed the average area by more than one-third. Seed is expensive, and to see wheat drying up for want of irrigation is heart-breaking. As the wheat and *jowàr* areas increase in a year of favourable rainfall, so do they contract if the rainfall is scant. The cotton, *chìna*, turnips, and tobacco areas will vary but little in favourable and unfavourable years. Below is an estimate in acres of the areas annually occupied by various crops on a well in Chiniot and another in Jhang :—

	Kharif.				Rabi.					Grand total.
	Cotton	Jowár	China	Total.	Wheat and Barley	Turnips	Tobacco	Mothra	Total.	
Chiniot..	3	4	2	9	18	2½	½	..	21	30
Jhang ..	2	1¾	⅞	4⅝	9½	1½	⅛	¼	11⅝	16

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Rotation of crops. System of agriculture on well lands.

The area immediately round the well will be under crop every year, and a small portion will be double-cropped. The area under *chína*, turnips, and tobacco will be or ought to be always manured, and a large portion of the cotton area also. The manured area shown in all the statistics is much understated. The unmanured portion of the well estate is renovated by fallows. The more culturable land there is round the well, the longer the fallow and the less frequent the crop. It it quite impossible to state that the farming is by courses, for no regular system of rotation is followed. Generally speaking, it is perhaps not unsafe to say that in the year the land nearest the well is manured and double-cropped, the land beyond sometimes manured and cropped once, and the lands outside bear wheat two years running, and get a fallow every third year, and sometimes lie fallow two years. Ordinary instances of double-cropping are as follows:—*Jowár* followed by wheat or barley; tobacco by *jowár* or turnips; wheat cut green by *jowár* for *chína*; cotton by *methra*; turnips by cotton; rice by wheat.

Manure.

The Jhang district is peculiarly rich in cattle, and the home production of manure on each well is considerable. The right to take village refuse is a fruitful cause of litigation. To many wells, flocks of sheep and goats are attached. These are rarely penned and fed on the land intended for cultivation, though instances are not absolutely wanting. They graze on the waste during the day, and are driven into a sheep-fold at night. Here their droppings accumulate. The manure is dug up twice a year and applied to the land. Old manure is the best, and ought to be powdery. New manure is said to be too strong and to burn. In the neighbourhood of the towns, their refuse and filth find a ready market. Sheep droppings are also brought in from the Bár on camels. The only expense is the cost of carriage. In the case of wells cultivated with any care, one-fifth of the area under crop in the year will have been manured. Land intended for tobacco, vegetables, and sugar-cane is most heavily manured. *Chína* and turnips get a fair, and cotton and wheat a small allowance. The average weight of manure given to the acre per annum is an unknown quantity, lying between 800 maunds and 50 maunds. In the Kachhi, soil dug out of old mounds is used as a top dressing. The earth that has collected in heaps round bushes is similarly used. Earth is not used anywhere else. The Kachhi is poorer in cattle than any other portion of the district. The following figures show the manured area in acres:—

STATEMENT OF MANURED AND UNMANURED AREA.

Number.	Tahsil.	Manured.			Unmanured.			Total area under crop.
		Ek-fasli	*Do-fasli.*	Total.	*Ek-fasli.*	*Do-fasli.*	Total	
1	Chiniot ..	16,655	2,138	18,793	71,574	1,544	73,118	91,911
2	Jhang ..	21,345	4,568	25,913	106,343	2,597	108,940	134,853
3	Shorkot ..	3,876	736	4,612	88,395	1,189	89,584	94,196
	Total of District ..	41,876	7,442	49,318	26,631	- 5,330	271,642	320,960

Note.—By an error subsequently discovered, the fallow area has been included in the return of the Jhang tahsil. The areas of the two other tahsils are the areas under crop. The Jhang area includes 7,358 acres of *halor* shown as *Ek-fasli*.

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System of cultivating *sailáb* lands.

The quality of the *sailáb* or alluvial lands, naturally moistened by the three rivers, is of considerable variation. *Sailáb* lands are cultivated in much the same way all over the district. Wheat is the favourite crop. In Chiniot hardly anything beyond a little Indian corn is grown for the autumn harvest. In Jhang some little *jowár*, *másh-mung* and *til* is grown. In Shorkot the area under *kharíf* crops is larger. There is absolutely no rotation of crops whatever on *sailáb* lands. Year after year the land bears its single crop—the richer soils wheat, the lighter a *kharíf* crop. No fallows are willingly allowed, but *sailáb* lands often lie fallow through failure of the floods. Sometimes when the wheat-producing virtue of the soil has become somewhat exhausted, or the land has become full of weeds, a couple of gram crops are substituted. It is said that change cleans the land. *Másh-mung* and *til* are never grown on well lands, nor are gram, *massar*, and peas. The mode of cultivating *sailáb* lands is described in the succeeding paragraphs which treat of each crop. *Sailáb* land is rarely manured, only turnips receiving a small allowance. It is supposed to burn the plants. The best *sailáb* lands are either those which have lately received a deposit of silt, or those in islands, *bela*, in the river, that are not inundated but obtain abundant moisture from percolation. Flooding, unless there is a deposit of silt, is apt, if of long duration or too often, to injure and weaken the land. It also hinders ploughing. With percolation ploughing is never stopped for a day, and the *talla* grass is destroyed before it gets rank. With percolation the *kharíf* crop is assured, but with floods or a deposit of silt it is dangerous to sow *kharíf* crops, and the land is usually kept for the spring harvest. Too much water is very nearly as much hated by the agriculturists as too little. It is not pleasant to find your house tumbling about your head, your land under water for a week, your grain stores damped and ruined, and hardly a dry place for the soles of your feet. Then this is generally followed by fever among human beings, and murrain among cattle. There is some small amount of double-cropping on *sailáb* lands—sometimes, especially after a year in which the floods have failed extending to as much as a quarter of their area. *Másh-mung* especially, and sometimes *jowár*, are often followed by wheat or *massar*. *Rawán* and melons are at times sown after all the spring crops.

Canal cultivation.

The only canals in this district are inundation ditches. Where land not attached to a well is irrigated, the cultivation and crops are the same as on *sailáb* lands.

Bárání cultivation.

Bárání or rain cultivation is found all over the district, but except in Chiniot, the area is so small as to require no special notice. Rain cultivation in this district might with greater propriety be called surface drainage cultivation. There is little or no rain cultivation that is not situate in a depression. *Bájra*, wheat, gram, *moth*, and *til* are the principal crops. No rotation of crops is practised. The slight rainfall renders at intervals a fallow course compulsory. Ploughings are liberally given, but no manure.

Agricultural implements and appliances.

Table No. XXII shows the number of cattle, carts, and ploughs in each tahsíl of the district as returned in 1878-79. A full list of

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agricultural implements, with their names and uses, is given at page 83 of Mr. Steedman's Settlement Report. The implements present no peculiarities, and it is needless to reproduce the description.

Principal staples.

Table No. XX shows the areas under the principal agricultural staples. The remaining acres under crop in 1880-81 and 1881-82 were distributed in the manner shown below :—

Crop.	1880-81.	1881-82.	Crop.	1880-81.	1881 82.
Kangni	144	120	Coriander	3	2
China	5,778	3,966	Chillies	1	3
Mattar	7,787	7,299	Mustard	318	329
Mash (Urd)	7,282	6,617	*Til*	3,061	3,047
Mung	2,213	565	*Tara Mira*	299	283
Massar	2,389	2,545	*Kasumbah*	1	1
Arhar	..	150	Other crops	10,265	12,232

On the opposite page will be found a statement, taken from Mr. Steedman's Report, giving the names of the various crops, together with the area of each as ascertained at the recent Settlement, and the seasons for sowing and reaping. The crop whose areas are especially small are classed together under the head of Miscellaneous. All soils not *sailába* or *báráni* are shown as *cháhi*, or irrigated from wells. The total area under crop is 326,374 acres, of which 72·7 per cent. is under spring harvest and 27·3 under autumn harvest crops. Where the *cháhi* and *sailába* areas were not ascertained, the total area is shown half way between the two columns.

Wheat cultivation.

Wheat.—The modes of cultivating wheat in the rainlands of Chiniot, the *sailáb* lands of the rivers, and on well lands, are of course very different. The chief difference is in the number of ploughings. Most are given in the case of *báráni* lands. It is of the utmost importance to the cultivator to have enabled as much rain as possible to sink into the soil, and to prevent, as far as he can, all loss of moisture by evaporation or surface drainage. Wheat takes six months to ripen, and is entirely dependent here upon the very uncertain rainfall. So as many ploughings are given to *báráni* land as possible, and the roller is frequently used. The seed is always sown with a drill. After seed time there is nothing to be done but sit down and wait until the harvest. In *sailáb* lands the soil should be ploughed up as often as is possible. *Talla* grass springs up very fast, and the cleaner the soil the better the crop. A good farmer will often begin to plough *sailáb* lands in June if percolation has rendered the soil sufficiently moist, and he will go on ploughing as often as he can until the 1st Kátik. High and continued floods are injurious to the wheat crop, because they stop the early ploughings. If the *talla* is thick, very strong bullocks are required to work a plough with any effect. *Sailáb* lands are almost always sown by drill. In Chiniot a great deal of wheat is sown broadcast. With well lands the procedure is different. If the rainfall is only ordinary, there will be hardly any land ploughed up for wheat before seed time arrives. The land intended for the *kharíf* is ploughed first. The bullocks are probably in a very bad condition when the first rain comes, and it is generally

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Principal staples.

Crop names.			Area in acres.				In what months.	
English.	Vernacular.	Botanical.	*Chāhi.*	*Sailāb.*	*Bārāni.*	Total.	Sown.	Cut.
Wheat ..	Kanak ..	*Triticum vulgare* ..	122,086	53,610	854	176,550	15th Octr. to 31st Decr. ..	15th April to 15th May.
Barley ..	Jau ..	*Hordeum hexastichum* ..	4,842	1,175	42	6,059	1st Octr. to 31st Decr. ..	1st April to 15th April.
Gram ..	Chhole ..	*Cicer arietinum* ..	..	12,859	893	13,752	10th Septr. to 25th Octr. ..	Ditto ditto.
Turnips ..	Sag, Gonglu ..	*Brassica Rapa* ..	26,562		..	26,562	25th Augt. to 25th Octr. ..	15th Decr. to end of Feb.
Peas ..	Mattar ..	*Lathyrus sativus* ..	..	7,799	..	7,799	1st Octr. to 1st Novr. ..	1st April to 15th April.
Lentil ..	Massar ..	*Ervum Lens* ..	..	2,404	..	2,404	1st Novr. to 15th Decr. ..	Ditto ditto.
Mustard ..	Ussu ..	*Brassica Bruca* ..	384		7	391	September ..	15th March to 1st April.
Trefoil ..	Methra ..	{ *Trigonella* .. / *Trifolium* .. }	509		..	509	{ *Sailāb* Octr., *Chāhi* 15th Novr. to 15th Decr. ..	1st March to 1st April.
Tobacco ..	Tammaku ..	*Nicotiana Tabacum* ..	984	..	..	984	1st March to 15th March ..	15th June to 15th July.
Melons ..	Vali, Vali, Kharbuze ..	*Cucumis Melo* ..	1,158		9	1,167	March and April ..	20th May to 30th June.
Beans ..	Rawan ..	*Dolichos Uniflorus* ..	..	631	..	631	15th-30th Augt. ..	15th-30th November.
Colsa ..	Sarshaf ..	*Brassica Campestris* ..	..	..	..	305	15th Octr. 15th November	April.
Miscellaneous ..	..	..	..	..	..	21		
Total area under Spring crops ..		..	..	..	..	237,134		
Cotton ..	Kapan, vanwar ..	*Gossypium herbaceum* ..	27,417	819	20	28,256	1st April to 1st May ..	15th Sept. to 15th Jany.
Great Millet ..	Jowar ..	*Sorghum vulgare* ..	29,335	8,756	177	38,268	15th July to 31st Augt. ..	25th Octr. to 15th Decr.
Spiked Millet ..	Bajra ..	*Penicillaria spicata* ..	1,140	..	705	1,845	1st July to 15th Augt. ..	15th Octr. to 15th Novr.
	Mash, Mah ..	*Phaseolus radiatus* ..	..	8,129	90	9,019	} August ..	15th Novr. to 15th Decr.
	Mung ..	*Phaseolus mungo* ..	..	341	30	344		
	Moth ..	*Phaseolus acontifolius* ..	..	177	201	378	15th July to 15th Augt. ..	November.
Sesame ..	Til ..	*Sesamum Orientale* ..	..	2,956	128	3,084	Ditto ditto. ..	Ditto.
Maize ..	Makkai, Makki ..	*Zea Mays* ..	1,347	825	6	2,178	15th June to 1st Sept. ..	1st Septr. to 15th Novr.
	China ..	*Panicum miliaceum* ..	4,241	..	40	4,281	{ 25th March to 15th April / 15th August to 15th Sept.	June. / November.
Sugar-cane ..	Kamad ..	*Saccharum officinarum* ..	222	..	..	222	March ..	1st Novr. to 15th Feby.
Rice ..	Munji ..	*Oriza Sativa* ..	..	..	..	140	15th July to 15th Augt. ..	1st Novr. to 15th Novr.
Italian Millet ..	Kangni ..	*Pennisetum Italicum* ..	98	..	18	116	15th May to 1st June ..	15th Augt. to 15th Septr.
	Sawak ..	*Oplismenus frumentaceus* ..	487	..	..	487	July ..	October.
	Mandua ..	*Eleusine corocana* ..	228	..	..	228	April ..	15th Octr. to 15th Novr.
	Kuria ..	*Pennisetum cenchroides* ..	4	..	..	4	July ..	October.
Vegetables ..	Tarkari ..	..	341		18	359	..	..
Poppy ..	Post ..	*Papaver somniferum* ..	19	..	..	19	15th October—15th Nov. ..	1st April—15th April.
Miscellaneous ..	..	..	..	..	..	12		
Total area under Autumn crops ..		..	..	..	..	89,240		

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Wheat cultivation.

the best policy to give them a holiday before anything is done. If, when the bullocks have recovered from the effects of work during May and June, there is still more rain, then the well-owner will plough up as much land for wheat, rolling it afterwards, as he intends to sow. If there is more rain in August and September, he will give it as many more ploughings as he can. If the land has been ploughed up four or five times before seed time and is still moist, the seed will be sown broadcast, ploughed in, rolled, and ploughed again. It will be allowed to germinate, and as soon as the blades have sprung up, it will receive its first watering. If, however, the rainfall has been deficient and the well oxen have been unable to do anything more than attend to the wants of the cotton, *jowár*, *chína* and turnips, until the wheat seed time comes, there will not be a single *marla* ploughed up beforehand. Now the sowing time is limited, and when the land has to be irrigated before being ploughed and sown, it is the zamíndár's object to lose as little time as possible. Accordingly he first irrigates the land. The seed is next scattered broadcast over the unploughed surface, and is then ploughed in and rolled. The usual number of ploughings is three or four, never less than two. Wheat is never sown by drill on well-lands, those in the Hithár that receive *sailáb* being excepted. In the Hithár, if the soil is moist enough, the well-lands are prepared for the wheat with almost as many ploughings as the pure *sailáb* lands. The seed is sown with a drill, and the irrigation beds and well channels are made afterwards. The wheat sowings begin about 15th October, and go on to the end of December, but by the 15th December the really good time has gone by. The amount of seed varies according to the time of sowing and the kind of soil. The earlier the sowing the less seed. The seed used per acre is for *báráni* lands 3 *topás* per *kanál*, 90 lbs. per acre; for *sailáb* lands 2½ *topás*, 75 lbs. early; 3 to 4 *topás*, 90 to 120 lbs. late; for *cháhi* 2½ to 3 *topás*, 75 to 90 lbs. early, 4 *topás* 120 lbs. late. On well lands in the Hithár on an average the wheat is watered three or four times after being sown, on Utár lands eight or nine times. In some exceptional years it ripens almost without a single watering. In others the irrigating power of the well cannot keep the whole crop sown alive. In its infancy the wheat plant suffers from *múla*—an insect that attacks the root—frost, and cloudy weather. Frost does not hurt early sown wheat, provided it is followed by rain in the first 15 days of January. It rather strengthens the plant, but early frosts not followed by rain play havoc with late sown young wheat. The lighter and more sandy the soil the worse for the wheat; later on, various blights, rust and smut attack the plant. Rust is the most dangerous disease. As a rule, rust does not render the ears absolutely empty, but it shrivels up the grain to half its natural size and weight. The wheat harvest varies according to the nature of the weather. In ordinary years it begins soon after the 15th April. There are four kinds of wheat grown chiefly in this district—*Chitti Rodi*, *Koni*, *Ratti Chighári*, and *Dandi Chighári*. The first is a white beardless wheat with a long thinnish ear, chiefly grown on the upland wells in the Shorkot tahsíl. The grain makes a good sample, plump and

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white. *Koni* is another white wheat with a beardless ear, which has a square unpointed end. The grain is small but whiter than the last. It does not yield well. The third is a red wheat, bearded, and is commonest of all. It is the common wheat on *sailàb* lands. *Kal Chughàri*, another red wheat, has a very handsome ear, thick and garnished, with a beard that is black at the root. *Lundi*, *jowàri*, and *pamman* are other kinds, but they are not often met with. Good wheat is grown on the upland wells in a year of favourable rainfall. The wheat of Salára, near Chiniot, has a great reputation. The average outturn of an acre of wheat on well lands is probably about 16 maunds, and on *sailàb* 8 maunds. In the month of May young wheat is cut with a sickle, and sheep and goats and cattle are turned on to the wheat, and it is grazed down once. The advantage of this is to strengthen the stalk and to prevent the wheat from being blown or falling down. High wheat crops on well lands after irrigation are liable to go down before a very little wind. The yield is lessened.

Barley.

Barley is appreciated for the following qualities. It ripens earlier than wheat, gives a heavier yield, requires fewer waterings, and will do well in a lighter soil. Very little comparatively is grown in this district. *Goji*, wheat and barley mixed, is a crop almost unknown. The two crops are grown together for early *khawld*, green wheat. Also any zamíndár who keeps horses will have a few acres under barley to provide them with grain. With these exceptions, not above half an acre is, as a rule, grown on a well. As soon as the barley ears begin to turn colour, the tenant commences to pluck them. They are scorched and eaten. On *sailàb* land barley is only grown where the soil is too light for a good wheat crop. It is in such case often mixed thinly with gram. Such barley is sometimes allowed to ripen, but more often is cut green as fodder. Barley as a fodder crop is often sown with turnips on well lands, and in the Hithár also, but less frequently. The best sowing time for barley is the end of Assú and the beginning of Kátik (October). It can be sown also even later than wheat. Occasionally it follows as a double crop after *jowàr* and *màh-mung* on *sailàb* lands. On well lands it is sown broadcast in *sailàb* with a drill. The amount of seed sown is much the same as in the case of wheat, from 3 to 4 *topàs* a *kanàl*, 90 to 120 lbs. an acre. On well lands, land to be sown with barley will be treated with the same amount of ploughings as wheat. On *sailàb* land less trouble is taken. In fact barley is now, owing to its fall in value, as compared with wheat, considered an inferior crop, and treated accordingly. It is liable to the same diseases as wheat in a less degree. There is only one kind of barley usually sown, called *nahri*. A kind of red barley called *kona kàlà* is also grown. The beard is almost black in colour.

Gram.

Gram is, after wheat, the favourite *rabì* crop, though, as compared with wheat, the area annually under crop is as 1 to 14. Gram, it may almost be said, is never irrigated by well water. Almost all the area under gram shown in the crop statement is *sailàb*. In the Utár also some little gram is grown in hollows

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Gram.

where surface drainage collects. Gram grows best in a stiffish Utár soil that in years of high floods gets flood water from the river. In the Hithár gram is sown in every description of soil, from stiff clay to sandy loam. A clayey soil suits it best, but with decent cold weather rain it does well in light loam. More gram is grown in the Shorkot tahsíl than elsewhere. There the floods extend far inland, and the lands scantily inundated by the outer edge of the floods are put under gram. Two ploughings are considered sufficient, and more are very seldom given. Seed is sown with a drill, and the amount averages 1½ *topa* per *kanál*, about 45 lbs. an acre. Very often gram only gets one ploughing, and more disgraceful farming can hardly be conceived. The seed is sown broadcast on the ground, and the plough is run through once only, and then the zamíndár complains that there is no yield. Gram is almost always grazed down once by cattle. In Kátik the calves are turned on to the gram fields when the plants are only two or three inches high. Later on in Poh, cows and horses are allowed to graze. Zamíndárs say that if the plant gets rain afterwards, it is not injured but is strengthened, and tillers better. The cattle too are greatly benefited by a little green food at this season of the year. The custom of grazing cattle on the green crops so prevalent in this district is probably due to the very great extent to which the agricultural population depend upon cattle for their sustenance. Milk, buttermilk, and curds are articles of the commonest consumption. Gram is grown with barley on *sailáb* lands. A very common mixture in the Shorkot *sailáb* lands is *máh-mung*, turnips, and gram. Sometimes the gram is absent, and sometimes the turnips. The advantage of such a crop is obvious. It provides fodder for the bullocks. *Máh-mung* and gram do very well together, and one or other usually furnishes a good crop. If the *mung* is good, the gram will be very thin, and the plants weak and lanky. On the other hand, excellent gram crops often follow thin *mung* crop. Gram is neither watered, weeded, nor manured. It is a very healthy strong plant if it is honestly cultivated. Once it has fairly shot up, it requires very little rain. Late rain, thunderstorms, and high winds are injurious. A good downfall at Christmas, and one shower about the end of January only are needed to ensure a first class gram crop. If there is rain in Chet (March-April), the pod and grains are generally attacked by caterpillars. The outturn of gram varies greatly. The average may be struck at about 10 maunds.

Turnips.

Turnips are on well lands a most important crop in this district. If the crop is a failure, the wheat suffers. The well oxen are very heavily worked during the wheat sowings and the first waterings, and require a large amount of strengthening food. This is furnished by the *jowár* and turnip crops. There is nothing else. If the turnips fail, or are late as they often are, owing to the failure of the first sowings, the working power of the bullocks is materially weakened, and the area under wheat does not get properly watered. Turnips, raw and cooked, are also eaten largely by the tenants during the cold weather. To them no less than to the bullocks, a bad turnip crop is a serious misfortune. It is

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Turnips.

sometimes destroyed by *kummí*, a kind of *múla*, that attacks the root. The best land on the well, well ploughed and liberally manured, is allotted to this crop. The land will generally have been ploughed up after rain once before the seed time arrives. The land is then irrigated and ploughed from three to six times with one or two rollings in between, if there are any clods to be broken up. The seed is sown broadcast, mixed with sand or earth or manure. Then the soil is once more rolled, and the irrigation beds and channels are made. If the soil has now become somewhat dry, a watering is given at once; but usually the first watering is given a few days after the plants have come up. When turnips are sown on well lands in soil that has been ploughed up once or twice previously, a couple of ploughings are given, and then the well beds and irrigation channels are banked up. The seed is sown broadcast, and mixed into the soil with the leafless branch of a thorny tree that is brushed over the ground, and a first watering is given at once. In *sailáb* lands the process is different. The land is ploughed twice or three times and rolled. The seed is sown broadcast and ploughed in with very shallow furrows. If turnip seed gets too deep into the ground, it does not come up. Turnip sowings, commence in Badrú and go on to Kátik. There are generally two sowings, early and late. Often a third sowing is made. The amount of seed used is one *paropi* a *kanál*, 3½ seers an acre. The crop ripens in three months. Zamíndárs say turnips are not ready till the first frosts. It is watered five or six times. No weedings or hoeings are given. A turnip crop should not be too thick, or it runs to leaf, and the bulbs suffer. A first class crop is that which yields a good fodder crop of leaves first, and a heavy root crop afterwards. The turnip leaves are cut once, sometimes twice on the very best lands, and then the bulbs are pulled up. On *sailáb* lands the leaves are not cut, but the whole plant is pulled up. The bulbs grow very large in *sailáb* lands. They are occasionally eaten on the ground, but this is of course very different from what is meant by the process at home. The great difficulty about the turnip crop is to sow the seed early and yet to get it to germinate well. It suffers from a kind of grasshopper—*tidda*. The crop also suffers from *tela* (blight), but never severely.

Peas.

Peas, mattar, are grown on *sailáb* lands only, and principally in Shorkot. New alluvial land, and the beds of *nálás*, are the spots generally chosen. It is valued as a fodder crop only. The grain is very seldom threshed for more than the seed. The pods are picked green and eaten as a vegetable. A couple of ploughings are all that *mattar* lands usually obtain, and the seed is even sown broadcast on *sailáb* land too moist to plough at all, and often yields good crops. Ordinarily the seed is sown with a drill, at the end of Assú or the beginning of Kátik. The harvest is in Chetar. The plant is pulled, not reaped. The plant suffers from caterpillars that attack the pod.

Massar. Methra.

The only other *rabí* crops that deserve notice are *massar* and a fodder crop *methra*. *Massar* is a *sailába* crop, and is never sown on other soils. Either new alluvial soils or light land that is not

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Massar. Methra.

good enough for wheat is selected. *Massar* is often the first crop sown on new *sailáb* lands, or follows *mattar*. The land is ploughed once or twice, and the seed is sown broadcast. One ploughing takes place after the seed is sown. Maghar and Poh are the months for sowing. From 1 to 1½ *paropís* per *kanál*, or from 30 to 45 lbs. of seed per acre, is the amount used. The crop ripens in the end of Chet and the beginning of Baisákh. It is reaped, not pulled. The yield is light. It is subject to much the same injuries as gram. The pods are attacked by caterpillars. Rain, wind and thunder are hurtful when the plant is in flower. *Methrá* is a fodder crop. It is grown on wells and *sailáb* lands. On wells it is found chiefly in the Kachhi circles of Jhang and Shorkot, and on *sailáb* in the south of the Shorkot tahsíl. On well lands it is sown after cotton and sometimes after *jowár*, rarely on uncropped ground. The seed is sown broadcast in the month of Maghar, is trampled into the ground and watered. The seed seldom fails to germinate. Five or six subsequent waterings are given, and the crop is ready to cut in Chet. A top dressing is often given to this crop. About 30 lbs. of seed is used per acre. On *sailáb* land *methra* is sown in Assú and the beginning of Kátik. Good new alluvium or a rich old clayey loam are the soils usually selected. The seed is sown broadcast and ploughed lightly in. One or two ploughings will have been given beforehand. The *sailáb* crop ripens about the same time as that on wells. *Methra* is a hardy plant, and suffers but little from disease.

Cotton.

Cotton is the most valuable of the *kharíf* crops in this district. It grows best on the Utár wells in a strong loam. Cotton on *sailáb* lands does not do well. One reason is that the mode of cultivation is more slovenly. Even on good wells in *sailáb* lands the crop is always lighter than in the uplands. The cotton of Shorkot grown on the Utár soil, irrigated during the hot weather months from *jhalàrs* or the inundation canal, is very good. Land intended for cotton ought to be ploughed up once beforehand after the cold weather rain. It is then manured. All cotton land ought to be manured, but a good deal never is. The manure is spread, and the first watering is given. If the zamíndár is lazy, he sows the cotton seed smeared in cowdung broadcast. The land is then ploughed twice and rolled. If the zamíndár is industrious, he will plough the land twice or perhaps three times before sowing the seed broadcast. The *sohága* is then put over the land twice to cover in the seed. The well beds and water channels are then made. In Chiniot cotton is sown much earlier than in the two southern tahsíls. Sowings are made from the end of Chet to the middle of Jeth (April and May). About 32 lbs. of seed are used per acre. Early-sown cotton is ready to pick in Badrú. All Badrú pickings belong to the tenant. The proprietor does not share in the pickings before the 1st Assú, and he takes nothing after the *Lohí* festival, the 1st Mágh. There is not much left after the 15th January, but what there is the tenant takes. Very little *mudhi* cotton is grown in this district. There is not enough rain. Cotton is hardly ever grown alone. Melons, *jowár*, *mandúa*, *kangni*, *sawák*, are almost invariably found in the cotton fields.

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Cotton.

Melons are sown with the cotton. The other crops are sown later on, and are used principally for fodder. *Jowár* so sown is hardly ever allowed to ripen. More or less of the other three crops ripen, and the reason is that they are sown where the soil is hard and saline and not well suited for cotton. Hence the cotton is light, and the deficiency is made up by the associated crop. In this district the cotton on wells is not usually ploughed after the bushes have reached some height. The fields are hoed and weeded, and the *jowár* or other seed is then scattered broadcast, in between the cotton bushes. A watering is at once given, and the seed usually germinates. Less *mandúa*, *kangni*, and *sawák* are grown in Chiniot than in the other tahsíls. During the hot months cotton is watered every sixth day. In the early stages cotton is liable to be injured by drought and hot winds. Too much rain is also injurious to cotton. The *tela* blight also attacks cotton. Early frosts do more damage than anything else. Two kinds of cotton are grown in the district, but the red-leaved plant is not often seen. The ordinary country plant is the most common.

Jowár.

Jowár and cotton are the two *kharíf* staples. *Jowár* is grown largely on wells and *sailáb* lands. On the *báráni* lands of the Chiniot tahsíl its place is taken by *bájra*. It is not grown to any large extent on the northern riverain villages of the tahsíl, where *makai* takes its place. A recent accretion of good soil, land well manured, and soil that is clayey and has lain fallow for some years, are the three best soils for *jowár*. On the river lands the best soil for *jowár* is a light sandy loam of recent formation, well moistened by percolation. There is not very much preparation in the way of ploughing. Twice is considered ample. The seed is then sown broadcast and ploughed in. The ground is not rolled unless it is cloddy. If the soil is not very moist, the seed is sown with a drill, in order to get it as deep down into the soil as possible. Sowings commence at the beginning of Sáwan, and go on to the beginning of Badrú. The earlier the *jowár* is sown the better. It ripens before the frost, and the stalks are sweetest. *Jowár* is only sown late for fear of floods. On wells, if there has been rain and the soil is sufficiently moist, the land is prepared and sown just as Hithár land. If there has been no rain, the land is first irrigated, then ploughed twice and rolled. The seed is sown broadcast and ploughed in. *Jowár* seed is always steeped in water the night before it is sown. *Jowár* is watered about every eight days, but it is hardly safe to lay down any rule other than that it is watered whenever it begins to dry up. *Jowár*, when needing water, is a sure index to the quality of the soil. Where the soil is poor, the *jowár* leaves shrivel up very soon; while the rest of the crop, if the soil is good, may show scarcely any signs of distress. The amount of seed sown is about 1 *paropi* a *kanál*, or ½ lb. an acre. There are numerous kinds of *jowár*. That grown near Khíwa and Khánúwána has the highest reputation. The varieties usually denote little more than grades of flavour in the grain when parched or scorched. Of one kind of *jowár* the ear is compact and the grains close together, of another the ear

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is made up of a number of small branched stems, each carrying grain. The first is called *gumma*, the second *tilyar*. *Jowár* is often manured. The Kachhi *jowár* ripens earliest in the early part of Kátik, that grown in the Vichanh next, and that on the Chenáb last, in the middle of Maghar. *Jowár* is rather a delicate plant. Besides the maladies to which it is subject before it comes to ear, early frost and late rain greatly diminish the yield and render the stalks tasteless and dry. It is also liable to *toka* and *tela*.

Jowár.

Bájra.

Bájra may be said to be grown in the northern corner of Chiniot nearest to Sháhpur only. It is hardly ever cultivated on well lands. After rain a couple or three ploughings are given. The seed is sown broadcast and ploughed in. It is not grown on wells, as its stalks are not good fodder. Otherwise it has a heavier yield than *jowár*, and less seed goes to the acre. It is sown from 15th Hár to 15th Sáwan, and reaped in Kátik.

Máh-mung.

Máh-mung are two different pulses, but they are grown together to a great extent in this district. The mode of cultivating both is the same. They are grown chiefly in the Hithár. There is perhaps a little more *máh* than *mung* in the Hithár. In the Utár *máh* is seldom cultivated, while in years of favourable rainfall large areas are sown with *mung*. Hardly any pulse is grown in Chiniot, and very little on the Jhelam. Most is grown in the Shorkot tahsíl. *Máh* and *mung* grow well in loams and light soils. Clays do not suit. Moisture in the soil is indispensable, and but little else is required. Two ploughings is all that the soil gets in the way of preparation. The seed is then sown broadcast and is ploughed in. The amount of seed varies from 1 to 1½ *topás* of *máh*, and from ¾ to 1 *topá* of *mung per kanál*. The *mung* is smaller than that of *máh*. It is sown in the end of Sáwan and the beginning of Badrú, and ripens in the end of Maghar or a little later. The crop is pulled, not cut. Fields that have been cropped with *máh-mung* are usually covered with a strong after-crop of *talla* grass. In the Utár *mung* is cultivated in depressions or the beds of channels that carry off surface drainage. One ploughing or two, seldom more, are given. The seed is sown broadcast and ploughed in. *Máh* and *mung* plants suffer from the attacks of grasshoppers—*tidda*—when young, and later on caterpillars attack the pods and grains.

Moth.

Moth, another pulse, is very seldom sown in the Hithár, but after good rain a considerable area in the Utár is sown with this crop. *Moth* is an extremely hardy plant, and the zamíndárs say that if it once puts forth sufficient leaves to cover its root, no amount of dry weather affects it. It is supposed to be a capital grain, and the green plant first-class fodder for horses. The *bhúsa* is also highly prized. The *bhúsa* of these pulses is of two kinds—*phaliát*, the broken shreds of the pods and stalks, *patri*, the leaves. Two ploughings are deemed sufficient. The seed is sown broadcast and ploughed in. About the same quantity is used as of *mung*. The sowings are made rather earlier than those of *máh-mung* in the Hithár, as the cultivator has not the fear of floods before his eyes, and the harvest is consequently also earlier.

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Til.

Til is grown in small quantities on *sailáb* lands, and on rain lands in the upland. It is also occasionally sown on the outskirts of a well, and such crops are sometimes irrigated. Very little is grown on the Chiniot *sailáb* lands. *Til* loves a light soil, but requires much moisture. It will grow even on *rappar* lands, sand covered with only a thin layer of soil. *Til* is much cultivated mixed with other crops,—*jowár*, *máh*, and *mung*. The land is prepared by one or two ploughings. The seed is sown broadcast, mixed with sand, in Sáwan and the early part of Badrú. The amount used is about 7½ lbs. The flowers are liable to be nipped and to fall off if the wind blows from the north. The root is also attacked by *múlá*.

Makaí.

Makaí, or Indian corn, is grown almost solely in the Chiniot tahsíl. A few patches may be seen round Maghiána. It is grown both on *sailáb* and well lands, not in the Utár. The southern boundaries of *makaí* cultivation are Thatti Bálá Rájah on the right, and Táhli Mangíní on the left bank of the Chenáb. The best *makaí* is grown in the Gilotar villages, between the Halkíwáh *nálá* and the river, and the villages of Salára, Kázián, and Chiniot. *Makaí* is not grown to any considerable extent on *sailáb* lands. It requires a more careful cultivation. The land is ploughed up four times. The seed is sown broadcast, and is ploughed in by one or two subsequent ploughings. The amount of seed is 12 lbs., and over, an acre. *Makaí* is generally not hoed on *sailáb* lands. On wells, if there has been no rain, the land is watered and ploughed up twice or oftener. Then manure is put on at the rate of 320 maunds an acre. Two more ploughings are given to mix the manure well into the soil. Then seed at the rate of 24 lbs. to the acre is sown broadcast. *Makaí* is sown thick on wells and is thinned out, the thinnings being used as fodder. The seed is ploughed in, the land rolled, and the well beds and channels made. *Makaí* ripens in 2½ months. It ought to be watered every sixth day if there is no rain, and every eighth day if there is. *Makaí* crops on well lands are hoed twice. *Makaí* sowings are made from Hár to Badrú. The sowings in the first ten days of Hár give the best crops. The preparation is the same, whenever the sowings are made. *Makaí* takes very little out of the land, and is almost always followed by a *rabí* crop, either turnips or wheat. *Makaí* is apparently free from the attacks of the insect world. It suffers from too much rain. If rain is continuous the field cannot be hoed, and the *makaí* stalk does not thicken, and but few maize cobs are produced.

China.

China is a crop that is largely grown in this district on well lands. Two crops are reaped in the year, the first in Jeth and Hár, the second in Maghar. Land is carefully prepared and manured. Only a small area is sown with each crop. The land is first irrigated and then ploughed a couple of times. The seed is then sown broadcast and ploughed in. A rolling is given, and the well beds are made. *China* requires a large quantity of water. Zamíndárs say it ought to be watered every fourth day. It is perhaps watered

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China.

every fifth or sixth day. The first *china* crop is used chiefly as fodder. It is very rarely threshed. The second *china* crop comes in useful for the wheat sowings. The crop is sometimes pulled up or cut half ripe, as much grain beaten out as can be, and the straw used for fodder. More generally the second crop is allowed to ripen. It is impossible to lay down any rule. If there have been good rains and grass is plentiful, the whole of the *china* will be allowed to ripen; if there has been but little rain and grass is scant, the whole crop may be used as fodder. *China* is not subject to any particular disease.

Tobacco.

Tobacco is, if properly cultivated, the most paying of all crops. As compared with sugar-cane, it sells for very nearly the same price per *kanál*, while it only occupies the soil for three months. It does not require any more manure or more frequent waterings. It does not exhaust the soil to the same extent. To ensure a good crop of an acrid and pungent leaf the soil must be heavily manured, but another crop can always be grown after, either *jowár* or turnips, or even both. Vegetables, onions, yams (*ghuiân*), *china* and melons are usually grown with cane. A favourite associated crop is *china*, which is supposed to protect the young roots of the cane from the rays of the sun, and also to keep the soil cool. *China* so grown is always used as fodder. But these associated crops are not nearly as valuable as the crops that follow tobacco. In preparing soil for tobacco, four ploughings ought to be given, accompanied by four rollings if required to break the clods. The manure is then spread. Sheep and goats' droppings are best for tobacco. This manure is procured from the sheep cots in the Bár, and costs from Re. 1-0 to Re. 1-8 per six camel loads. A camel carries about five maunds. City refuse costs Rs. 3 a hundred *boráhs*, containing 50 maunds. On the wells near Jhang, where tobacco is an important crop, 100 *boráhs* of manure are given to the *kanál*, about 400 maunds an acre. The manure is spread and well mixed into the soil with two or three ploughings. The land is next rolled until all clods are broken. The water channels and beds are made and the transplants are put in, and a watering is at once given. The transplants are obtained thus. They may be purchased at the rate of 4 annas per square cubit, or be raised by the zamíndár himself. A *marla* of seedlings is sufficient to plant out a *kanál*. The soil of the seedling bed is first carefully prepared and well worked. The seeds are sown broadcast, and are covered with an inch thickness of fine manure, and watered. The seedling bed is covered with grass during the frosty months. Transplanting commences in the middle of Phágan. The waterings are given at first every three or four days, and they gradually diminish to once a week. The first weeding and hoeing is given about 25 days after the transplanting, as soon as the plants have taken good root. Two or three hoeings are given afterwards. Three or four top dressings are given. The roots are seldom manured. The breaking off of the young shoots from the stem (*Kallí bhanna*) involves much labour. The flower is also pulled off. The shoots are plucked off every fourth day for a month. If this is well done, the tobacco leaves broaden, and the flavour becomes more acrid. Tobacco is cut a little, about ½ a *kanál*,

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Tobacco.

at a time. It is spread on the ground for 3 days. The leaves are not then stripped off, but the plants are heaped on the floor of a dark room and covered with blankets or *razáis*, and remain thus for a week. At the end of the week the leaves are stripped off the stalks, and twisted into ropes and carried off by the purchaser. A good deal of adulteration goes on. *Sajjí* or lime or saltpetre water is sprinkled on the leaf to make it bitter. Old bulrush mats are burnt, and the ashes mixed with cut tobacco. Sand is mixed with the tobacco twists to make it weigh heavy. The tobacco plant suffers most from the attacks of the *múlá* and *tela* insects. The *mulá* is a whitish-brown woolly caterpillar with a black head. The base of the stem is attacked just underneath the ground. These *múlá* attacks often commence most inconveniently, just when the tobacco is being sold. It is then the zamíndár's care to get up early in the morning and carry off and bury all the plants that have died during the night. The more rain the worse the *múlá* attacks. Both ripe and unripe plants are attacked. Rain is only needed to wash off dust deposited on the tobacco leaves by dust-storms, or carry off the *tela* blight. *Tela* is worst in dry seasons. It is the product of an aphis. There is no remedy but rain. Heavy rain in May is most injurious. All the pungency of the leaf is washed out, and the weight is diminished.

Sugarcane.

Sugarcane is grown for *gúr* in the Gilotar and adjoining villages of the Kálowál *iláka* in the Chiniot tahsíl. In Chiniot itself and Maghiána it is grown to some extent, and sold in the *bázárs* but is not made into *gúr*. Sugarcane grows best in a rich loam, well manured, in or near the Hithár, where water is very near to the surface. If it is *once* flooded by river water, so much the better, but floods are dangerous. Sugarcane requires constant waterings, and if, as in Maghiána, the well is assisted by a *jhalár*, it is so much the better for this crop. Not only does a *jhalár* raise more water, but a change from well to river water seems to greatly benefit the cane. There is a good deal of uncertainty about this crop ; and this, combined with the immense amount of labour needed, and the long time that it occupies the ground, has brought it into some disrepute in Maghiána, where rice has of late years to a large extent taken its place. Sugarcane is never grown near Maghiána as a sole crop. Vegetables and *chána*, one or other, sometimes both, always accompany it. Land cannot be ploughed too often for sugarcane, and must be heavily manured. The cuttings are planted in trenches and lightly covered over with soil, and a watering is at once given. When the cane plants are three months old, and about 2 or 2½ feet high, the trenches are filled up and manure put to their roots. At this time any other crops that may have been sown with the cane is pulled up. The cane is ready to cut about the middle of Kátik, but it is often in the ground until Phágan. The crop is hoed four for five times. At first it is watered every fourth day up to the 1st Jeth or later, and once a week from that time until it ripens. The worst enemy of sugarcane is the white-ant, and constant waterings are needed to keep this pest away. Jackals are also extremely fond of cane. They

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chew but do not eat it. Frosts are injurious if they are early. A frost-bitten cane loses a large portion of its juice.

Rice.

Rice.—Very little rice is grown in this district. A little is grown in new silt along the Jhelam, and there is some rice cultivation on the Hithár wells of Maghiána and Jhang. The rice of the Jhelam *sailáb* is a coarse variety, and not much care is taken in its cultivation. The silt is not ploughed up. The seed is scattered broadcast over the surface and left to take its chance. If the silt is thick, the crop is generally a good one; but if sand is near the surface, the rice dries up when the river goes down. The sowings commence in Sáwan-Badrú. About 16 lbs. of seed go to the acre. The crop ripens in three months. This mode of rice cultivation is called *pokh.* Another method is to transplant seedlings into these mud banks. No ploughings are given; the seedlings are simply stuck into the mud. The seedlings are grown on a well. This mode is called *roth.* The crop takes the same time to ripen, cultivated either way. On the Maghiána well lands the soil is most carefully prepared for rice. Two or three ploughings are given, and the land is well manured. Then, when the soil has been well worked, the well beds are formed, the water turned on, and the transplanting done by boys. The continual bending down makes this rather hard work, and they are paid liberally. The crop is watered twice a week. The soil must on no account be allowed to dry up. *Jhaláris* are largely used in Maghiána to assist the wells. Harvest time is in Kátik. The seedling beds are prepared, and the seed sown in Baisákh and Jeth. About two *pai*, between 12 and 16 lbs., of seed are used for 8 *marlàs*, and the transplants given are sufficient for an acre. Transplanting is effected in Sáwan in Maghiána. Rice does not suffer from diseases. It is a crop that gives a heavy yield.

Kangni, Sawák, Mandúa, Kúria.

Kangni, sawák, mandúa and *kúria* are crops that are grown more or less in various parts of the district, but the total area under them is insignificant. *Sawák* and *kúria* are seldom seen. Patches are grown on wells for fodder by zamíndárs who keep horses, but the grain is seldom threshed. They are grown on well lands as a *kharíf* crop, and require constant irrigation. *Kangni* is grown to some extent on the leased wells in the Government Bár to the east of Jhang. Stray patches are seen on wells in villages, generally associated with cotton, rarely by themselves. *Mandúa* is more generally grown in the two southern tahsíls, hardly ever in Chiniot. It is sown on stiff saline clays, and does well where other crops hardly germinate. It is a capital fodder crop, and can generally be cut twice, often three times, if there is rain. In Daulúána in the Kachhi of Shorkot and adjoining villages, it is largely grown for its grain as a single crop. In other parts it is more usually found as a mixed crop with cotton. It is sown in Chet, Baishákh, and reaped in Assú, Kátik. The land should be ploughed up twice or thrice. The seed is sown broadcast at the rate of 7½ lbs. per acre. A watering should be given once a week. *Mandúa*, it may be worth noting, is the *ragi* of Mysore. The systems of cultivation seem to be curiously different.

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Melons.

Melons are largely grown all over the district on *sailáb*, well, and rain lands. The rain-land cultivation is confined to the Bár, and water melons only are, as a rule, sown. Zamíndárs say that they grow wild in years of good rainfall, and there is no reason for disbelieving them. In *sailáb* lands the seed is sown with a drill, and the drills are wide apart. Two or three ploughings are given, and one rolling last of all before the seed is drilled in, at the rate of about ½ *topa* a *kanál*, about 15 lbs. to the acre. Sowings are made in Chet, and the fruit ripens in three months. Sowings are made at intervals. The chief melon cultivation is, however, on wells in the neighbourhood of large villages and towns. The melons of Jhang and Chiniot are exceptionally good. The land is first irrigated liberally, but not over-manured, then ploughed and rolled. The seed is sown broadcast at the rate of about 7½ lbs. to the acre. The seed is sometimes steeped in water and sometimes not. Young melon plants are benefited by rain, but it is injurious later on. The first sowings are made in Phágan, but most melons are sown in Chet. Melons sown in Phágan on good cool land are not watered until 1st Chet, but the melon beds are constantly hoed and weeded. Melons sown in Chet are watered regularly from the first. Well-tended melon fields near a town will be hoed perhaps 10 or 12 times. The crop is generally sold to Kirárs on the ground. They do all the weeding and watching, the proprietor or cultivator being only responsible for watering the crop. The waterings are more frequent when the plants begin to fruit. Melons do well in a light loam. Round Jhang they are grown in a soil that appears to be slightly removed from sand. The plant is subject to *tela* blight and to *hadda*. It is not very clear what *hadda* is, but it appears that the leaves are attacked by some winged insect and die, and the whole plant withers away. Rain is most injurious to melons on wells.

Ussu.

Ussú is hardly grown at all in this district. In very favourable rains, a large area is sown on the Kachhi wells as a *bárání* crop, and is afterwards watered once or twice. The preparation is of the roughest description. One ploughing or two are given. The seed is sown broadcast and ploughed in. The crop is used for fodder. Sowings take place in Assú and Badrú. The crops ripen in Chet. *Ussú* is a hardy plant, but suffers a little from worms and caterpillars.

The division of the crops (*batai*).

The division of the crops has now to be described. After the grain has been threshed and winnowed, it is collected in one heap (*dherí*), and is divided between the landlord and tenant and *kamíns*. First of all the village *mulla's* fee, *rasúl arwáhí*, is measured out, and next that of the village *mirásí* (*jakh*). The remaining grain is then divided between the landlord and tenant according to the rent conditions. It is measured out in *topás*. The last portion of the heap is not divided. It is called *talwára*, and is reserved to pay the *kamíns*, each of whom gets what he is entitled to therefrom. The fees of the *kamíns* have already been noticed at page 90, 91. The weighman generally manages to leave just enough grain to satisfy these fees, *kamíána*. If any grain

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remains over, it is usually made a present to the tenant. Some hard landlords insist on taking their share. If the *talwára* is insufficient, the deficiency is made up from the proprietor's and cultivator's heaps proportionately to the shares on which the produce is divided. Each carries off his share, and the business is finished.

The reaper's wage.

It is the general custom throughout the district to pay the reaper a daily wage, but in some villages he is paid from the grain heap. The normal pay of a reaper is 3 sheaves (*mohán*) for every 100 sheaves reaped and tied. This would make his wage $\frac{1}{34}$th of the produce, but in reality he manages to obtain a much larger share. His wage sheaves are twice as big as the ordinary ones, and instead of 1 in 34 he really takes two. He also gets a bunch of ears (*trárán*). In Leiah the difference between the reaper's and the ordinary sheaf is recognised, and the one is called *dhárwán* (the winner), and the other *hárwán* (the loser). *Saras* and *niras*, great and small, are also names used. If the reaper is paid from the grain heap, he takes his fee with the other *kamíns*. His pay is calculated at so much a day or so much a *kanál*, rarely at a fixed share of the produce. In one Shorkot village this latter rate is fixed at 10 *topás* per *kharwár*, or $\frac{1}{16}$th. For cutting well wheat there is not much variation in a reaper's rate of pay, but in the case of *sailáb* lands it has an upward tendency. The landlord may be anxious on the score of floods to get his grain in as early as possible, or the crop may be full of thistles and camel thorn, and the reapers cannot be got to touch it except for pay higher than the ordinary. It is the general custom throughout the district for the reaper's fee to be paid to whoever reaps; whether he be the tenant or not.

The winnower.

The winnower is paid at the rate of $\frac{1}{40}$th, 4 *topás* per *kharwár*. Winnowing is performed with a reed tray (*chhaj*), and the man who winnows is called *chhajjí*. He is almost always a man of the sweeper (*chúhra*) class. His pay is high, but it covers not winnowing only, but all the other manifold jobs that he does for the proprietor during the year. The threshing (*gáh karna*) of the grain is usually performed by the tenant's bullocks, and he is not paid for this work ; but if another man's bullocks are called in, he takes a regular fee (*gahera*), or 1 or 2 *topás* per yoke per day. There are some exceptions to the above rule in the case of upland wells, where there is some difficulty in obtaining tenants. A *topa* or a *topa*-and-a-half is allowed out of the *talwára* heap, half of which goes to the proprietor and half to the tenant.

Average yield. Production and consumption of food grains.

Table No. XXI shows the estimated average yield in lbs. per acre of each of the principal staples as shown in the Administration Report of 1881-82, while below will be found the more detailed estimates which were used to calculate the value of the gross produce for purposes of assessment in the Settlement of 1880. The average yield of the principal staples has in many cases been noticed while describing each in the preceding pages. The average consumption of food per head has already been noticed at page 49. The total consumption of food grains by the population of the

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Average yield. Production and consumption of food grains.

district as estimated in 1878 for the purposes of the Famine Report is shown in maunds in the margin. The figures are based upon an estimated population of 348,027 souls. On the other hand, the average consumption per head is believed to have been over-estimated. A rough estimate of the total production, exports, and imports of food grains was also framed at the same time; and it was stated (page 152, Famine Report) that some 200,000 maunds were imported on the average in each year to meet the local consumption. Of this, three-quarters were said to be wheat and the remainder gram, *bájra*, &c. The imports were chiefly from Sháhpur, Míánwáli Dera Ismáil Khan, and Montgomery.

Grain.	Agriculturists.	Non-agriculturists.	Total.
Wheat ..	378,418	703,545	1,081,963
Inferior grains ..	312,194	226,139	538,333
Pulses ..	255,432	326,646	582,078
Total ..	946,044	1,256,330	2,202,374

Settlement rates of yield per acre.

The assumed yield in maunds per acre on the various soils for different crops, used by Mr. Steedman in the recent assessments, is given below for Jhang and Shorkot. The Chiniot produce estimates were framed by Mr. Fryer, and are not given by Mr. Steedman :—

Circle.	Tahsil.	Assumed wheat yield per acre.			
		Chahi Khalis.	Chahi Sailab, &c.	Sailaba.	Barani.
		Mds.	Mds.	Mds.	Mds.
River Jhelam	Jhang .	9	10	7½	5½
River Chenab .	Jhang	9	9	6½	5½
	Shorkot .	9	10	7½	6
Centre Chenab ..	Jhang	9	9	6½	.
	Shorkot	9	10	6½	6
Centre Jhelam	Jhang ..	9	10	7½	5½
Kachhi . ..	Jhang .	8½	..	6	5½
	Shorkot ..	8	10	..	5
Bar	Jhang .	8½	..		..
	Shorkot ..	9	..	6½	6
Utar Vichanh ..	Jhang	8½	9	6	..

For *jowár*, cotton, and barley, the differentiated rates were—

Tahsil.	Soil.	Cotton.	Jowar.	Barley.
		Mds.	Mds.	Mds.
Shorkot	Chahi Khalis ..	4	6	10
	Chahi Sailaba, &c. ..	5	7	11
	Sailaba and Barani .	3	5	8

Tahsil.	Soil.	Circle.	Cotton.	Jowar.	Barley.
			Mds.	Mds.	Mds.
Jhang	Chahi Khalis ..	River and Centre Jhelam .	5	7	11
		Rest of Tahsil .	4	6	10
	Chahi Sailab, &c...	River and Centre Jhelam .	5	7	12
		Rest of Tahsil	4	6	10
	Sailab and Barani..	River and Centre Jhelam	3	5	8
		Rest of Tahsil	3	5	7

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Settlement rates of yield per acre.

Besides wheat, cotton and *jowàr*, the only other staples are gram, turnips, *mùng-màh* and peas. The assumed rates of yield are given below:—

	Gram.	Turnips.	*Mah-Mung.*	Peas.
	M. S.	Rs. A. P.	M. S	Rs. A. P.
Jhang	6 0	12 2 0	5 0	6 0 0
Shorkot	5 30	12 0 0	5 20	8 0 0

The above crops occupy in Shorkot 92 per cent. and in Jhang 93 per cent. of the total area under crops.

Arboriculture and Forests.

Table No. XVII shows the whole area of waste land which is under the management of the Forest Department. The whole 123 square miles are unreserved forests. Their nature and administration are discussed in Section B of Chapter V.

The following note on the forests of the district has been kindly furnished by Mr. Wild of the Forest Department. The principal trees of the districts have already been described at pages 15—18. The date palms of Jhang are noticed at page 81 :—

"The figures below show the forests of the district under the control of the Forest Department. They adjoin the Bár forests of the Gujránwála district. They are studded with a low open jungle of *jand (Prosopis spicigera)*; *van (Salvadora oleoides)*; *karil (Capparis aphylla)*; and *mallá (Zizyphus nummularia)*, sometimes one, sometimes another predominating; but never of such magnitude as to produce the impression of a forest. The trees are stunted, often decayed, and fit for nothing but firewood. The ground however is, in seasons of a fair rainfall, thickly covered with grasses of various sorts, many of them excellent fodder; and the importance and value of the tract for purposes of pasture is undoubted. The soil is comparatively rich, and only requires irrigation to be fairly productive. The wood produce is some 45 to 50 miles distant from any centre of consumption, and it is therefore difficult to utilise it. The *rakhs* came under the Forest Department on 5th August 1872. The Government right in the land is absolute, there being no village rights in the tract. The grazing lets for some Rs. 10,000 yearly. It is proposed to declare this area as a protected forest, and to include it in the Gujránwála district, with the forests of which it is continuous."

Names of Forests.	Area, acres	Names of Forests.	Area, acres.
		Brought forward ..	43,670
Uchkera	3,589	Kirana	7,333
Ahlniwah	7,355	Butwali	6,357
Giluana	6,338	Saidpura	6,400
Musrana	6,356	Shadiwali	7,161
Azri	5,942	Ghari	6,873
Kazianwali	5,592	Shahkot	4,098
Farranwali	8,498		
Carried over ..	43,670	Total Acres ..	81,892

SECTION B.—DOMESTIC ANIMALS.

Chapter IV, B.

Domestic Animals.

Stock statistics.

According to the Punjab Administration Report of 1878-79, the stock of this district was as below. Further details are given in Table No. XXII :—

Cows and Buffaloes	Horses	Ponies.	Donkeys.	Sheep and Goats.	Camels.
124,250	1,752	236	3,297	221,560	9,309

These figures appear to be open to suspicion. According to the enumeration of 1875, the last that was made for *Tirni* purposes, the numbers of cattle were—

Cows and Bullocks, &c.	Buffaloes.	Sheep and Goats.	Camels.
127,310	29,928	271,011	20,162

This enumeration is probably nearer the mark than the one given in the Administration Report, although the difficulties attendant on numbering cattle in this district are enormous.

Horses.

The horses of this district deservedly bear a high reputation. The mares are esteemed by competent judges to be among the best in the Punjab. A horse fair is held annually and prizes distributed, but the fair is not very popular among the people, and the Tahsíldárs have generally to make an energetic "whip" to get the zamíndárs in. There are an enormous number of different breeds of horses recognised among themselves by the zamíndárs of this district. They are usually named from some particular mares of super-excellent quality, and belong to a particular family. A few of the best known are mentioned in the margin. According to native opinion a mare ought not to be put to a horse, before she is 3½ years old, and there are two proper seasons, one in Chet-Baisákh (15th March—15th May), the other Assú-Kátik (15th September—15th November). The foal lives on the dam's milk alone for the first month only. In the second, other milk is given in addition. Camel's milk is most esteemed; if it cannot be procured, cow's or goat's milk is given. The milk is sweetened with sugar and is given in small quantities at first; and is gradually increased to as much as 5 or 6 seers a day. The foal is weaned when six months old from the mare, but continues to be given other milk for from 4 to 6 months longer. Gram soaked in milk is also given. Colts are allowed to run loose in the young wheat, and also given *jowár* and *moth*. Breaking-in commences when they are two years old. They are at first ridden bare-back. An amble is the favourite pace, but an accomplished mare is

Name of breed.	Name of breeders.
Hassian ..	Muhammad Khan and others, Beloches of Chhatta.
Pahni ..	Bharwanas of Khiwa and Mukhiana.
Kajlan ..	Sayads of Ratta Matta.
Garrian ..	Sayads of Kot Isa Shah.
Matwalian ..	Liwanas of Rajanas
Morman ..	Sayads of Ahmadpur.
Jiwanian ..	Alianas of Kot Khan.

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Domestic Animals.

Horses.

taught to go through many other exercises. A horse in this district is considered to be full of work up to the age of 12 or 13 years, and to deteriorate afterwards. A mare will go on producing foals until she is 15 years old. Horses are fed as below :—

Period.	Food.
15th December—31st March	Green wheat.
1st April—31st June	*Bhusa*, grass and grain.
1st July—31st August	Grass and grain.
1st September—15th November	Indian corn cobs, *jowar*, and *bajra* heads and stalks.
15th November—15th December	*Missa bhusa*, *jowar*.

Every horse-breeder sows early half, or a quarter, of an acre with wheat, or mixed wheat and barley, to afford green food at an early date for his horses. This is ready a good month before ordinary wheat. A good deal of importance is attached to this point, and the zamíndárs vie among themselves to have the best and earliest *kháwíd*. Grain is given regularly by wealthy men, but, as a rule, ordinary zamíndárs only give it when they cannot get green food or fodder (*patthe*). It is not given as a matter of course. To get a horse into splendid condition you stall him in a darkened shed with green wheat up to his hocks, in much the same way as fat cattle are fed at Home with straw up to their knees. Boiled *moth* and *máh*, mixed with molasses and turmeric, is also given. The process takes 30 days, and at the end of the time the horse comes out as fat as butter, and unfit to do any work whatever. The names of a horse according to age are given below :—

	To 6 months	To 2 years	To 3½ years	To 4½ years	To 6 years	After 6 years.
Horse	Bachhera	Sarral	Doak.	Chausala	Panjsala.	Mallo Panj.
Mare	Bachheri	Bihun.		Ghori		

The colours in this district are *kumáit*, dark bay; *kakka kumait*, chestnut; *kakka*, light bay; *súwa*, grey; *nukra*, white; *chína*, roan; *garra*, piebald; *mushki*, black; *kulla*, something between a light bay and a light brown. A horse's colour ought always to be bright. Among the unlucky spots on a horse are the following :—

Tára peshání, a small white star or blaze on the forehead. This is an abominable mark; if the horse has a white face, it is all right.

Arjal, two legs, or one, different in colour from the rest of the body. If they are all four the same colour, it is a good point; four white stockings are good, two bad; and one very bad.

Bhawríán are rough spots on the coat, not liked, especially if near the tail. *Náganíán*, a line of rough hair on the neck, if pointing to the front, a good point, if backwards, towards the rider, exceedingly bad.

Garra, eyes of different colours.

Partnership in horses is carried in this district to an extent unknown in most other parts of the Punjab. It is called *bháíwáli*.

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Domestic Animals.

Horses.

A share in a horse is called *sum*. A one-quarter share is *pair*, a one-eighth *do-band*, and a one-sixteenth *tankàla band*. To be partners with another man in a mare is the next thing to, and very nearly as good as being his relation. Strong objections are sometimes made in Court to a witness, on the ground that he, and the party who called him, held shares in the same horses. No rules whatever regulate the feeding or keeping of a mare held in partnership. If one of the sharers wants her, he sends for her. It is a point of honour for the partner who has temporary charge of the mare to keep her in first-class condition as long as he has her. If she gets into heat, he arranges to put her to a horse. A partner, who rears the foal of a mare held jointly till it is two years old, is entitled to a one-quarter share in addition to his original share in the remaining three-fourth share. This is known as *hak sàmbh*. A horse's hide is not used in any manufacture, and is considered worthless.

Camels.

The camels of this district are divided into the Thal camels, *Thalwan*, and those of the Bárs, *Bàri*. The Thal camel is a much lighter beast than the Bár camel, and cannot carry so heavy a load. The female becomes in heat when 3 years old, in the months of Maghar—Chet. The period of gestation is 13 months. The foal is only allowed to suck a small quantity of milk for the first fifteen days. After that the foal sucks at will, and begins to browse after 21 or 22 days. Weaning takes place when the foal is 12 months old. The udder of the dam is tied up in a bag. A camel is first loaded when 3 years old, and broken into the nose string. To start with, not more than 3 maunds is the load. A full grown camel carries 8 maunds. A laden camel will go double stages, or from 20 to 30 miles a day comfortably. Only males are, as a rule, laden. A male camel will work 20 years, and a female bears up to the same age. A male camel of average quality used to be worth Rs. 60, and a female Rs. 80. Prices have gone up at least 50 per cent. of late, owing to the demand for camels for work in Afghánistán. Sikhs and others from the Mánjha buy up the surplus stock annually. A camel is not an affectionate animal. He is spiteful and bears malice, and *shutar kína* is the climax of revengefulness. The names for camels at different ages are given below :—

	To 1 year.	To 2 years.	To 3 years.	To 4 years.	To 5 years.	To 6 years.	To 7 years.	To 8 years.
Male ..	Toda.	Mazat.	Trihan. / Lihak.	Chhatr.	Doak.	Chhiga.	Nesh.	Nesh.
Female ..	Todi.	Do.	Puraf.	Lihari.	Trokar		Kuteli.	

After 8 years and thenceforth the male is called *armosh* or *út*, and the female *jharot*. A camel is shorn annually, and the hair made into ropes and *borahs* used by camel men. The hide is worth from Rs. 2 to 3, and is made into *kuppàs*, huge jars for carrying *ghì*.

Bullocks and Buffaloes.

The bullocks of this district are very poor, undersized beasts. They are not bred with any care, and the zamíndárs do not purchase

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Domestic Animals

the high class bullocks that are bred in Sindh and Dera Ghází Khán. A bullock is put to work when 4 years old, and works well until he is 9 or 10. A bullock's age averages from 12 to 13 years.

Bullocks and Buffaloes

Buffaloes are hardly used at all for agricultural purposes in this district. If a male is calved, his throat is cut, and he is devoured within a few hours of his birth. Bullocks are fed from Maghar to Mágh on turnips, *bhúsa* and cotton seed, from Phágan to Baisákh on green pea stalks, *methra*, wheat and grass; from Jeth to Kátik on *jowár*, *rawán*, *chína*, *bhusa*, and grass. A bullock is called *vachha* to 1 year, *vahrká* to 3 years, *vahr* to 5 years, and then he becames a *dánd*. A buffalo is *katta* for the first twelve months, and *jhota* afterwards. On the average (and a poor average it is) a bullock is worth Rs. 20 and a buffalo Rs. 15. The skins of dead buffaloes and bullocks are *given* to the *mochís* by zamíndárs, and sold to them by non-agriculturists. A bullock's hide is worth Rs. 1, a buffalo's Rs. 2.

Cows and milch Buffaloes.

Cows and female buffaloes commence to breed when they are 5 and 6 years old respectively. The period of gestation in each case is 9 and 10 months. For the first three days after birth the calf is only allowed a little milk. The milk is then too rich for the calf's digestion. The first day's milk is called *bauhli*, and that of the 2nd and 3rd, *hoblú*. Calves are weaned when three months old. After three months they graze, and are only allowed to suck for a few moments to please the cow. Where, in the case of a buffalo, the calf is a male and is devoured without delay, various artifices are used to induce the buffalo to give milk. On the average a cow gives 2½, and a buffalo 5, seers of milk a day, including all the good, bad, and indifferent cattle that are in the district. A cow gives five and a buffalo seven calves. Zamíndárs will never sell milk. It is one of the strict points of honour not to do so. *Ghí* is produced and exported to a large extent. With a good year of grass in the Bár, milk or buttermilk is worthless. It is often far easier to get than water. Hindu shop-keepers attach themselves to all the large herds of cattle in the Bár in favourable years and buy up the *ghí*. It goes from Chiniot to Amritsar and Lahore, and from the southern portion of the district to Mooltan and Karáchi. The names for cows and buffaloes of different ages will be found in the margin. Cow and buffalo hides are worth much the same as those of bullocks and male buffaloes.

	Cow	Buffalo
To 1 year	Vachhi	Katti
,, 3 years	Vahri	Jhoti
,, first calf	Dhanap	Garap
Afterwards	Gai.	Majh

Sheep and Goats.

Sheep and goats are among the most useful stock of the district. The ewes are put to the tup when 1½ years old. The period of gestation is six months. From one to three lambs are produced at a birth; for the first 20 days the lamb gets all the milk. Afterwards the lamb begins to browse, and is only given a small portion of the milk. The ewe gives milk for four months. Lambs and kids are always kept separate from their dams. When their full supply of milk is stopped, green shoots and branches of *kíkar*, *ber*, &c., are given them to nibble. Sheep are shorn twice a year, in September—October and April—May. About a seer of

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Sheep and Goats.

wool is given in the two shearings. Wool is now a very valuable commodity, and zamíndárs say that flock-masters in the Thal wear bracelets of gold. It mostly goes down to Karáchi. The figures below give the price of Bár wool and also of goat's hair at Maghiána for the last twenty years, in rupees per maund. Thal wool is cheaper :—

Year.		1861	1862	1863	1864	1865	1866	1867	1868	1869	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879	1880
Rupees per maund.	Wool ..	8	10	1[illegible]	11	10	9	7	8½	9	8½	8½	10	12½	4½	10	10	9	10	12	18½
	Hair .	5½	5⅝	[illegible]	5⅝	5¼	5½	5¼	4¾	5	5	5 6/16	5¼	5½	5½	5¾	9	6½	6½	8	9

Sheep skins are used for making women's shoes, covering saddles, &c. As far as the age at which put to the male, number of kids produced, and method of rearing, there is hardly any difference between sheep and goats. A goat gives from 2 seers to ¼th seer of milk a day; nothing is made from the milk. A goat is usually killed when 5 or 6 years old. Sheep and goats produce about 5 times. Goat's hair is shorn every six months, and is made into pannier bags, saddle bags, ropes, nose bags, *salítás*, &c. It is called *jat*. The names of sheep and goats according to age are given below:—

	Sheep.		Goats.	
	Female.	Male.	Male.	Female.
To 6 months .	Lelí ..	Lela .	Bakra, Pathora	Pathori.
To 1 year .	Ghirapi .	Ghirap	Chhilota	Kharapi, Kharap
Afterwards .	Bhed ..	Chhatra .	Chhela .	Chhelí.

Donkeys.

The donkeys can hardly be called agricultural stock. No zamíndár owns one or would ride on one. They belong to Kírárs and *kamíns*, chiefly *máchhís*. They are used to carry manure from the sheep-folds on to the land, and in various other ways. The donkey of these parts is of the most ordinary description.

SECTION C.—OCCUPATIONS, INDUSTRIES, AND MANUFACTURES.

Occupations of the People.

Table No. XXIII shows the principal occupations followed by males of over 15 years of age as returned at the Census of 1881. But the figures are perhaps the least satisfactory of all the Census statistics, for reasons explained in the Census Report, and they must be taken subject to limitations which are given in some detail in Part II, Chapter VIII, of the same Report. The figures in Table No. XXIII refer only to the population of 15 years of age and over. The figures in the margin show the distribution of the whole population into agricultural and non-agricultural, calculated on the assumption that the number of women and children dependent

Population.	Towns.	Villages.
Agricultural .	5,194	168,346
Non-agricultural	31,787	189,969
Total .	36,981	358,315

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Occupations of the people.

upon each male of over 15 years of age is the same, whatever his occupation. These figures, however, include as agricultural only such part of the population as are agriculturists pure and simple; and exclude not only the considerable number who combine agriculture with other occupations, but also the much larger number who depend in great measure for their livelihood upon the yield of agricultural operations. More detailed figures for the occupations of both males and females will be found at pages 133 to 142 of Table No. XIIA, and in Table No. XIIB of the Census Report of 1881. The figures for female occupations are exceedingly incomplete.

Commercial classes.

Jhang is not a commercial district. Most of the commerce is local and petty. Of the total shown as commercial population, the chief are the *baniás* or petty shop-keepers, who number nearly half of the whole; next in numerical importance come traders in salt; and next dealers in grain. The Khojás are the wealthiest traders in the district. The Khojás of Chiniot trade chiefly in *ghí*, cotton, wool, leather and horns, which they export to Calcutta and Bombay, and import thence cloth, indigo and silk.

Principal industries and manufactures.

Table No. XXIV gives statistics of the manufactures of the district as they stood in 1881-82. On this subject the Deputy Commissioner wrote as follows in the District Census Report for 1881:—

"The industrial classes are chiefly composed of *páolís*, or weavers. Their women assist them largely in their handicraft, and some 1,200 women are shown as occupied in preparing the warp for weaving. Beside this, spinning and grinding corn are the principal female occupations. Women do not work in the fields in Jhang. The *páolís* form nearly a third of the entire industrial classes, and are chiefly to be found in villages, there being 15 weavers in the villages to 2 in the towns. They are greatest in numbers in the Jhang tahsíl. In Jhang you find every class and tribe represented among the weavers. Even poor Siáls do not despise the profits to be obtained by throwing the shuttle. The *mochís* are the next in numerical importance, then potters, then basket and mat-makers (*chhaj pattal banánewála*), carpenters, *pinjárás* or cotton-cleaners, and *charohás* or washermen. Chiniot is remarkable for its wood-work; also for its *namdáhs*, which are cheap and of excellent quality. Very fine decorated door frames are made there. Also fine *Kalamdáns* or pen-cases, boxes, and *kajáwás*. Carved and foliated work, and geometrical and foliated tracery suitable for balconies, doors, door-posts, and other architectural adjuncts can also be made. Some beautiful specimens of Chiniot wood-work have been made for the Lahore Exhibition. Kot Isa Sháh is remarkable for coloured wood-work, legs of *chárpáis*, &c. First-rate saddles and harness are made in the towns of Jhang and Maghiána. The shoes of Maghiána are valued for their fine embroidered gold work. Very good imitation Chubb locks are made in Jhang and are exported to other districts."

Mr. Lockwood Kipling, Principal of the Lahore School of Art, has kindly furnished the following note on some of the special industries of the district:—

"There is no export from Jhang of enamelled ware or of articles of silversmith's work, but it is evident, from the contributions from

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Principal industries and manufactures.

Maghiána to the Punjab Exhibition of 1882, that silver enamel is wrought there, though not perhaps with the neatness and finish that distinguish the work of Mooltan.

"Chiniot, in this district, has long had a reputation for its carpentry and wood-carving. In the native scheme of town-life the house is frequently built to fit the irregular space at the owner's disposal, and its chief decorative features are elaborately ornamented doors and window-frames, which are often brought from considerable distances; just as Scandinavian doors and the like are now brought ready made to London. It is for this kind of work that the Chiniot wood-carvers are chiefly known. The wood used is usually *shìsham*, locally *tàhli*. The design of this really admirable work, though ornate and tending, like many other branches of modern Indian art, to excessive minuteness, is still remarkably pure and good. The carving is sharp and clear, the *mergols* or spandrels of the arches and the details of the pilasters are correctly drawn, while the free use of panels of geometric tracery of an Arabic character, both framed and carven, gives an air of solidity and richness. It is surprising that no use has hitherto been made either by private persons or by the Government of the best and cheapest carpentry in the province.

"At Chiniot also is wrought an inlay of brass in *shìsham* wood, bearing a general resemblance to that of Hoshiárpur, but much bolder, freer, and better in design. This is applied to desks, glove boxes, &c., but is obviously capable of more varied and extensive application. The contrast of the brass with the dark wood is most effective."

Course and nature of trade.

Imports.

There are no statistics available for the general trade of the district. Table No. XXV gives particulars of the river traffic that passes through the district. The imports of food-grains have already been noticed at page 121. Jhang is an importing district, especially as regards food grains. Cloth and Manchester goods come from Mooltan and Calcutta, partly by rail and partly on camels. Lime is brought down the Jhelam from Khusháb. Wheat is imported from Wazírábád, Jalálpur to the east of Gujrát, Khusháb, and Mooltan in boats, and from Chúnián on camels. *Jowàr*, gram, barley, *moth*, *mung* and oil seeds are brought on camels from Kamália, Sirsa, and Firozpur. Some wheat also comes from Firozpur at times. Rice is sent on camels from Amritsar and Lahore. Oil and oil seeds are imported from Amritsar and Bhakkar in Dera Ismáil Khán. Moist sugar comes from Muzaffarnagar, Jullundur and Amritsar by rail and camels. Raw sugar *(gúr)* is brought from Siálkot and Muzaffarnagar, and lump sugar from Mooltan. Fruits are brought down from Ghazní and Kandáhár by *powindàhs*. Spices, condiments, and drugs come from Amritsar. Timber is floated down the Chenáb from Wazírábád and Kashmír territory. Cotton and thread are brought on camels from Dipálpur, Mooltan, Firozpur and Sháhpur. Hardware comes up from Karáchi in boats, not by rail. Amritsar also supplies a little. Camels, donkeys and boats bring salt from Khusháb and Pind Dádan Khán, and alum from Kálábágh.

Exports.

The export trade of this district consists mainly of a coarse description of cloth, *khaddar*, which is made in the district and sold chiefly to *powindàh* merchants. In 1879 eight lakhs of rupees' worth of this cloth was sold in Maghiána alone. Most goes to

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Exports.

Afghánistán, and not a little to Dera Ismáil Khán, Dera Ghází Khán, Sakhi Sarwar, and Mooltan. The means of conveyance are camels. Boats are hardly ever used. Soap is sent in large quantities to Núrpur, in the Sháhpur district, to Kálábágh, Dera Ismáil Khán, and the Salt Range country, on donkeys and camels. Wool is exported to Karáchi and Firozpur. In favourable years immense quantities of *ghí* are produced in the Bár, and are exported to Amritsar, Firozpur, Bannú, and Dera Ismail Khán, on camels, and to Karáchi by boat. The *sajjí* of this district goes to Amritsar, Siálkot, Gujránwála and Wazírábád. The principal marts are Maghiána and Chiniot. Kot Isa Sháh, Wású Astháná and Ahmadpur are busy villages. Coarse cloth, wool, *sajjí* and soap, hides and *ghí*, are the exports. Food grains, sugar in various forms, and miscellaneous articles, are all imports. The fairs of the district have already been noticed at page 51.

SECTION D.—PRICES, WEIGHTS AND MEASURES, AND COMMUNICATIONS.

Prices, wages, rent rates, interest.

Table No. XXVI gives the retail *bázár* prices of commodities for the last twenty years. The wages of labour are shown in Table No. XXVII, and rent rates in Table No. XXI; but both sets of figures are probably of doubtful value. The figures of Table No. XXXII give the average values of land in rupees per acre, shown in the margin, for sale and mortgage; but the quality of land varies so enormously, and the value returned is so often fictitious, that but little reliance can be placed upon the figures. The wages of agricultural labour in the villages have already been noticed in Chapter III (page 89), and rent rates and the selling price of land in the same Chapter at pages 86—88 and 93—95. These figures are taken from the Settlement Report, and are more trustworthy than those of the table quoted above.

Period	Sale		Mortgage	
	Rs	A	Rs	A
1868 69 to 1873 74	12	2	6	15
1874 75 to 1877 78	17	8	11	15
1878-79 to 1881 82	20	14	15	14

Prices of agricultural staples.

The following are the village prices of the chief agricultural staples used for the conversion of produce estimates into money at the Settlement of 1880 :—

	Kharif					Rabi	
	Cotton	Jowar	Mah mung	Til	Bajra	Wheat	Gram
Chiniot	12½	32½	23	15	27¾	30	33¾
Jhang	12½	34	28	15½	27	30	40
Shorkot	12½	32	Mah 27, Mung 30	15	27½	30	36

On these prices Mr. Steedman remarks :—

"I do not think the adopted prices are too high. They rather err on the side of lowness. It is probable that the average price-current of the next 20 years will show considerably higher rates. The opening

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Prices of agricultural staples.

of the railway to Karáchi and the thereby increased facility for exporting grain to Europe will most certainly tend to keep up the prices of food grains in the Punjab. It will prevent all accumulation of grain. As soon as the price of wheat falls to the point at which it becomes profitable to export it to Europe, it will be exported, and prices will hardly ever fall below this minimum. In Jhang the prices of food grains depend almost entirely upon the prices ruling in other districts. A good harvest does not necessarily bring down prices, unless harvests elsewhere are good and prices falling. The food grains produced in Jhang do not suffice for the consumption of the resident population, and large imports are made from outside districts. The wheat harvest of 1878 was above the average, and that of 1879 a bumper crop. Yet prices were higher after both than during the famine year of 1868-69. If exportation to Europe maintains the prices of the food grains in the Punjab at a steady high rate, prices in this district will be generally a little higher, because the home production is deficient, and the price of grain grown in Jhang will always tend to rule at a rate equal to the grain in adjoining districts, plus the cost of carriage to Jhang. For these reasons, I think that the prices assumed are far more likely to be lower than higher than future prices."

Weights and measures.

The linear measure used in Jhang is—

1 quarter áná	1 inch.
24 inches	1 hath (hand).
3 háths	1 karam, or double pace.
3 karams	1 kan.
4 kans	1 chain of 66 feet.

The square measure is—

1 square karam	1 sirsái.
9 sirsáis, or 1 square kan	1 marla.
20 marlás	1 kanál.
4 kanáls	1 bígah.
2 bígahs	1 ghomáo = acre.

The country *karam* is some six inches longer than the *karam* used in the Settlement Survey. Otherwise there is no difference in the two measures. In measuring up crops that have been sold standing, the rate is usually so much per *kanál* of 22 *marlás*. The extra two *marlás* are allowed to compensate for bare patches, water-courses and borders. Melons, green wheat, tobacco, sugar-cane, turnips, &c., are near large towns sold in this way.

There is only one measure of capacity throughout the district:—

4 thúlas	1 paropí.
4 paropís	1 topá.
4 topáhs	1 páí.
20 páis	1 bhora.
40 páis	1 kharwár.

The *topah* is the standard, and the other measures vary proportionately to the variation in the *topah*. The *topah* is nominally two seers in weight, but generally something under. Wheat is the standard, and there is of course the difference between the weight of a *topah* of wheat and a *topah* of other grain. In this district the *topah* varies from $1\frac{1}{2}$ seers to 2 seers through $1\frac{3}{4}$, $1\frac{7}{8}$, $1\frac{15}{16}$. There are several ways of using the *topah*. When the measure is so held that only grain actually in the measure is given, it is said

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Prices, weights and measures, and communications.

Weights and measures.

to be used *gokhú*. If some grain is piled up on the thumb and finger between which the rim is held, it is said to be used *chappa*. There is only one measure of weight.

16 chittacks	1 seer of 80 tolás.
40 seers	1 maund.

Cotton is sold by weight, and also wool and goat's hair. *Ghí* is purchased from the Bár graziers by the *kachcha* seer of ⅜th seer.

Communications.

The figures in the margin show the communications of the district as returned in quinquennial Table No. I of the Administration Report for 1878-79, while Table No. XLVI shows the distances from place to place as authoritatively fixed for the purpose of calculating travelling allowances. Table No. XIX shows the area taken up by Government for communications in the district.

Communications.	Miles
Navigable rivers	166
Unmetalled roads	954

Rivers.

The Chenáb and Jhelam, which unite in this district at Trimmu ferry, are navigable for country craft throughout their courses in this district. The ferries and the distances between them are shown below, following the downward course of each river.:—

Rivers	Stations	Distance in miles	Remarks
Chenab	Shekhan		Ferry
	Chiniot	12	Do
	Sajanke	10	Do
	Tahli Mangini	10	Do
	Thatta Muhammad Shah	7	Do
	Chorgalli	5	Do
	Alli Pur	6	Do
	Billi	3	Do
	Jhang	4	Do
	Mohal	4	Do
Jhelam	Kot Isa Shah		Do
	Mari	7	Do
	Kalera	8	Do
	Kot Khan	5	Do
	Sajhar	4	Do
	Machhiwal	6	Do
	Shahidanwala	5	Do
	Kot Maldeo	8	Do
	Chauntra	7	Do
Joint Jhelam and Chenab	Trimmu	4	Ferry and boat bridge
	Haweli Bahadur Sháh	8	Ferry.
	Islampur	5	Do
	Hassuwali	6	Do
	Badh Rajbana	7	Do
	Kharanwala	6	Do
	Dab Kalan	7	Do
	Kacha Kamira	6	Do
	Faqir Sial	6	Do.

The bridge of boats is of the utmost value, indeed almost indispensable in the interests of the *powindáhs* and passengers by the mail cart. The difficulty and trouble attendant on embarking a refractory camel in a ferry boat is only equalled by the roughness of the measures taken. Zamíndárs much prefer to cross the rivers when in flood on inflated skins. The passage is effected much quicker; there is no waiting for the boat, and there is no charge. Zamíndárs, even of the best class, prefer the *sarnái* to the ferry boat.

Chapter IV, D.

Prices, weights and measures, and communications.

Roads

The main line of road is that from Dera Ismáil Khán to Chícháwatni on the Láhore and Mooltan Railway. There is a mail cart service between Chícháwatni and Cháh Bhareri, a distance of 88 miles, under the management of the Deputy Commissioner of Jhang, and beyond Cháh Bhareri under the district authorities of Dera Ismáil Khán. The road from Cháh Bhareri to within a mile or two of Tobha Tek Singh, some 56 miles in length, is annually laid down with *sar* grass. There is a considerable passenger traffic by the mail cart line, and during the cold weather months the road is thronged with strings of camels belonging to the *powindáh* merchants of Afghánistán passing to and from the Railway Station of Chícháwatni. The two other principal lines of road are from Wazírábád to Mooltan, running along the Chenáb through the towns of Jhang, Chiniot and Shorkot; and from Jhang to Sháhpur, which crosses the Chenáb north of Jhang, and goes thence to Kot Isá Sháh and along the Jhelam. A considerable amount of traffic passes between Lahore and Chiniot on the road that runs through the Bár. Another road runs up from Muzaffargarh through Rangpur, Ahmadpur, and Garh Máhárája to Athárah Hazárí, and up north through Máchhíwál to Girot and Khusháb. There is some little use made of the road from Jhang to Ghapní and Gúgera. The other roads are purely district roads, and scarcely made use of except by residents of the district. The old road to Leiah, branching off from the Dera Ismáil Khán line at Athárah Hazárí, was of some importance when Leiah was the head-quarters of a Commissionership, but is little frequented now. Besides the bridge of boats over the Chenáb at Trimmú and a culvert here and there on the main roads, there are no bridges in the district.

There are good *saráis* at all the principal places of the district and along the more important roads, *viz.*, at Chiniot, Bhowáná, Khíva, Jhang, Bhagrí, Shorkot, Nalera, Roránwáli, Tobha Tek Singh, Bhamb, Athárah Hazárí, Cháh Bhareri, and at several places in the interior of the Bár. In the matter of rest-houses, not a single district in the Punjab is as well off as Jhang. There are first-class bungalows at Chiniot, Bukhári, Tobha Tek Singh, Shorkot, Ahmadpur, Chund, and Kot Isá Sháh. Besides these, there are either good houses, interior *sarái* rooms, or pokey little police bungalows at or within reach of every place of importance. Otherwise it would be impossible to be away from the Sadr, for Jhang, as Mr. Monckton notes, "is a region destitute of living brooks and shady groves." The table given on the next page shows the principal roads of the district together with the halting places on them, and the conveniences for travellers to be found at each. Communications on the road from Chícháwatni Railway Station to Jhang are sometimes interrupted in the rains by floods on the Rávi river along the part of the road between the River Rávi and Kamália town. Similarly, communication with Dera Ismáil Khán is rendered difficult during the rains by floods in the Chenáb at the Trimmú ferry. On each of the rivers in question there is a bridge of boats; the Rávi bridge stands the whole year round, but the Chenáb bridge is dismantled during the hot season.

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Prices, weights and measures, and communications.

Roads.

Route.	Halting place.	Distance in miles.	Remarks.
WAZIRABAD TO MOOLTAN.	Chiniot ..	..	Encamping-ground and serai, bungalow, unmetalled.
	Bukhari ..	9	Encamping-ground and rest-house, unmetalled.
	Bhowana .	14	Encamping-ground and sarai, bungalow, unmetalled.
	Khiva ..	13	Encamping-ground, sarai, and police bungalow, unmetalled.
	Jhang ..	16	Encamping-ground and dak bungalow, unmetalled.
	Baghri ..	12	Encamping-ground and sarai, bungalow, unmetalled.
	Haveli Bahadur Shah	5	Rest-house, unmetalled.
	Kaim .	12	Encamping-ground, unmetalled.
	Shorkot .	10	Encamping-ground, sarai, bungalow and rest-house, unmetalled.
	Basti Islam ..	10	Encamping ground, unmetalled.
	Lalora .	12	Encamping-ground and police bungalow, unmetalled.
JHANG TO SHAHPUR.	Jhang .	..	Encamping-ground, dak bungalow, and sarai unmetalled.
	Chund Bharwani ..	11	Encamping-ground and rest-house, unmetalled.
	Bhamb .	9	Encamping-ground and sarai, bungalow, unmetalled.
	Kot Isa Shah ..	9	Encamping-ground and rest-house, unmetalled.
CHICHAWATNI TO DERA ISMAIL KHAN.	Tobha Tek Singh	.	Encamping-ground, dak bungalow and sarai, unmetalled.
	Roranwali .	10	Sarai, bungalow and encamping-ground, unmetalled.
	Jhang .	13	Encamping-ground, dak bungalow and sarai, unmetalled.
	Diraj .	11	Rest-house, unmetalled.
	Athara Hazari .	6	Encamping-ground and sarai, bungalow, unmetalled.
	Bhareri	13	Encamping-ground and dak bungalow, unmetalled.
KHUSHAB TO MUZAFFARGARH.	Ahmadpur	.	Emcamping-ground and rest-house, unmetalled.
	Garh Maharaja .	16	Police bungalow, unmetalled.
	Mad Mapal .	10	Encamping-ground and police bungalow, unmetalled.
	Tibba Gapli .	10	Encamping-ground, unmetalled.
	Athara Hazari ..	10	Encamping-ground and sarai, bungalow, unmetalled.
	Machhiwal ..	14	Encamping-ground and police bungalow, unmetalled.
	Chan dna ..	12	Encamping-ground, unmetalled.
	Bullo .	12	Encamping-ground, unmetalled.
JHANG TO GUNGERA.	Borala .		Encamping-ground, unmetalled.
	Ghapni ..	10	Encamping-ground and sarai, bungalow, unmetalled.
	Samundri ..	18	Encamping ground and sarai, bungalow, unmetalled.

There are also minor roads, all unmetalled, from Jhang to Sháh Kot 70 miles,—Chiniot to Sháhpur 26 miles,—Chiniot to Khurianwála 24 miles,—Dijkot to Ghapni 16 miles,—Shorkot to Sarai Sidhu 5 miles,—Káim to Tobha Tek Singh 27 miles,—Shorkot to Bhareri 24 miles,—Shorkot to Sanási 25 miles,—Shorkot to Kamália 23 miles,—Lálián to Koh Kerána 8 miles,—Kerána to Barána 16 miles,—Lálián to Kálowál 15 miles,—Lálián to Kándiwál 10 miles,—Chiniot to Sháh Kot 30 miles, Shekhán to Pakka Mári 32 miles,—&c., &c., on which there are no fixed halting places.

The three dák bungalows are completely furnished and provided with servants. The police bungalows and district rest-

houses have furniture, crockery and cooking utensils, but no servants.

Chapter IV, D.

Prices, weights and measures, and communications.

Post offices.

There are Imperial Post Offices at Jhang Sadr, Jhang City, Chiniot, Shorkot, Ahmadpur, Athárah Hazárí, Barána, Chhatta, Garh Máhárája, Kot Isá Sháh, Kot Shákir, Láliána, and Máchhiwál. Money Order Offices and Savings Banks are combined with the Post Offices at Jhang Sadár, Jhang City, Chiniot, Shorkot, Athárah Hazárí, Kot Isá Sháh, Lálián, and Máchhíwál.

Telegraph.

There is no Railway Telegraph line in the district. The nearest Railway or Telegraph Station is Chícháwatni on the Mooltan line, 56 miles from Jhang.

CHAPTER V.

ADMINISTRATION AND FINANCE.

SECTION A.—GENERAL.

Chapter V, A.

General Administration.

Executive and Judicial

The Jhang district is under the control of the Commissioner of Mooltan, who is also Civil and Sessions Judge. The ordinary head-quarters staff of the district consists of a Deputy Commissioner and two Extra Assistant Commissioners. Each tahsíl is in charge of a Tahsíldár assisted by a Naib-Tahsíldár, a Kánúngo, and a Náib-Kánúngo. The table below gives the patwári statistics for each tahsíl :—

Tahsil	Number of villages	Tahsil Statistics			Number of Patwaris		Circle Pay								
		Khasra numbers	Holdings	Revenue	Patwaris	Naibs	Highest			Lowest			Average		
				Rs			Rs	A	P	Rs	A	P	Rs	A	P
Chiniot	265	304,112	27,177	97,299	35	5	16	8	0	9	0	0	12	1	0
Jhang	358	503,861	39,453	1,55,190	58	8	17	12	0	9	3	0	11	10	0
Shorkot	189	210,067	19,844	1,12,292	41	6	16	8	0	9	0	0	12	1	0
District	812	1,018,040	86,474	3,64,700	134	19							11	4	0

There are two Munsiffs in the district; one has jurisdiction within the Jhang and Shorkot tahsíls, and the other within the Chiniot tahsíl, and some of the villages of the Jhang tahsíl lying on the right side of the road from Jhang to Sháhpur. The statistics of civil and revenue litigation for the last five years, are given in Table No. XXXIX.

Criminal, police, and gaols

Class of Police	Total strength	Distribution	
		Standing guards	Protection and detection
District (Imperial)	395	44	351
Municipal	65		65
River	5		5
Ferry	9		9
Total	474	44	430

The police force is controlled by a District Superintendent. The strength of the force is shown in the margin. In additon to this force, 485 village watchmen are entertained and paid for by a house tax levied from villagers by lambardárs. The statement on the opposite page gives the number of *thánds*, outposts, and patrolling stations.—

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General Administration.

Criminal, police, and gaols.

Stations or Thanas.		Outposts or Chaukis.		Road Chaukis.
1st class.	2nd class.	1st class.	2nd class.	Patrolling posts.
Uch	Kurianwala ..	Burana ..	Ahmadpur ..	Burala.
Bhowana ..	Ghapoi ..	Khiva ..	Kaim ..	Roranwali.
Jhang		Garh Maharaja	Kot Isa Shah.	Lalera
Chiniot		Baghri ..	Shekhan ..	Chund.
Shorkot		Massan ..	Kandiwal ..	Samundri.
Kadirpur ..		Bukhari ..	Shahkot ..	Dijkot.
Lalian				Tobha Tek Singh.
				Rahu Khanuwana.
				Basti Islam.
				Lodhranwala.
				Chandna.
				Chah Bhareri.
				Maru Killa.

There is a cattle-pound at each *thànà* controlled by the Deputy Commissioner through the police. The district lies within the Lahore circle, under the control of the Deputy Inspector-General of Police at Lahore.

The district gaol at head-quarters contains accommodation for 380 males and 11 female prisoners. Table No. XL gives statistics of criminal trials, Table No. XLI of police inquiries, and Table No. XLII of convicts in gaol for the last five years.

Cattle-lifting is the normal crime and practised in all parts of the district. Of the criminal tribes proclaimed under the Criminal Tribes Act, there are none resident in the district.

Revenue, Taxation, and Registration.

The gross revenue collections of the district for the last 14 years, so far as they are made by the Financial Commissioner, are shown in Table No. XXVIII; while Tables Nos. XXIX, XXXV, XXXIV, and XXXIII give further details for Land Revenue, Excise, License Tax, and Stamps respectively. Table No. XXXIIIA shows the number and situation of registration offices.

The central distilleries for the manufacture of country liquor are situated at Jhang and Shorkot. The cultivation of the poppy is allowed, at the rate of Rs. 2 per acre.

Table No. XXXVI gives the income and expenditure from District Funds, which are controlled by a committee consisting of 24 members selected by the Deputy Commissioner from among the leading men of the various tahsíls, and of the Civil Surgeon and the 3 Tahsíldárs, as *ex-officio* members, and Extra Assistant Commissioner as Secretary, and the Deputy Commissioner as President. Table No. XLV gives statistics for Municipal Taxation, while the Municipalities themselves are noticed in Chapter VI.

The income from Provincial properties for the last five years is shown below:—

Source of Income.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.
Ferries with boat-bridges	8,732	6,603	9,329	8,847	10,834
Ferries without boat-bridges ..	16,913	15,595	14,424	13,937	15,269
Staging bungalows, &c.	..	..	..	..	..
Encamping-grounds	..	..		..	..
Cattle-pounds	1,601	1,545	1,404	1,147	1,056
Nazul properties	602	305	371	522	.
Total	27,848	24,048	25,528	24,453	27,159

Chapter V, A.

General Administration.

Revenue, Taxation, and Registration.

The ferries, bungalows, and encamping-grounds have already been noticed at pages 132-135, and the cattle-pounds at page 137. The total number of *nazúl* properties are 27 in this district, the principal of which are a Police Officer's quarters with a garden, 5 acres in extent, situate in the Sadr Station under care of the Deputy Commissioner, which was built in 1853 as quarters for the officer in command of the troops then stationed here, and a house for the Tahsíldár of Jhang built for this purpose in 1853. Of the other 25 *nazúl* properties there are 7 plots of land in the Jhang town of inferior quality, and the remainder 18 are of no value and situated in the interior of the district, under the care of the Deputy Commissioner. In addition to these small plots forming the ordinary *nazúl* property of the district, by far the largest part of the district may be considered *nazúl*, as the grazing *rakhs* which are the property of Government, and the rights of grazing on which are sold by auction annually, contain 2,100,573 acres out of a total of 2,327,734 acres for the whole district. These *rakhs* are the exclusive property of Government, and are under the direct management of the Deputy Commissioner; they are described at page 122. Figures for other Government estates are given in Table No. XVII, and they and their proceeds are noticed in the succeeding section of this Chapter, in which the land revenue administration of the district is treated of.

Statistics of land revenue.

Table No. XXIX gives figures for the principal items and the totals of land revenue collections since 1868-69. The remaining items for 1880-81 and 1881-82 are shown below :—

Source of revenue	1880 81.	1881 82
	Rs	Rs
Surplus warrant *talabanah*	529	397
Malikana or proprietary dues	394	179
Fisheries	44	44
Revenue, fines and forfeitures	48	136
Other items	76	2,367

Table No. XXXI gives details of balances, remissions, and agricultural advances for the last fourteen years ; Table No. XXX shows the amount of assigned land revenue ; while Table No. XIV gives the areas upon which the present land revenue of the district is assessed. Further details as to the basis, incidence, and working of the current settlement, will be found below in the succeeding section of this Chapter.

Education.

Table No. XXXVII gives figures for the Government and Aided, High, Middle and Primary schools of the district. The High school is at Jhang; there are Middle schools for boys at Jhang, Maghiána, Chiniot, Shorkot and Ahmadpur; while the Primary schools are situated at Jhang, Maghiána, Kot Isa Sháh, Kot Shákir, Chhatta, Mári, Munda Saiyad, Machhíwál, Chund Bharwána, Sháh Jíwana, Pír Kot Sadhana, Chela, Khíva and Bagh in the Jhang tahsíl; at Lalián, Langar Makhdúm, Thatti Bálá Rája, Baráná, Kalri, Rajoá, Shekhán, and Chiniot in the Chiniot tahsíl ; and at Shorkot, Ahmadpur, Garh Máhárája, Hassú Balel, Havéli Bahádur Sháh, Kaim and Kúnd Sargáná in the Shorkot tahsíl. Besides

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General Administration.

Education.

these there are eight female schools which are situated, three at Jhang, three at Maghiána, one at Kot Isá Sháh, and one at Bágh in the Jhang tahsíl. The district lies within the Mooltan circle, which forms the charge of the Inspector of Schools at Mooltan. Table No. XIII gives statistics of education collected at the census of 1881, and the general state of education has already been described at pages 52 and 53. There are some indigenous schools in the district; among these, three schools situated at Ballo in the Jhang tahsíl, and Kháki and Mirnewála in the Shorkot tahsíl, are alone worthy of notice.

Jhang District School.

This school was at first purely vernacular, but became a District School in 1861, and the high department was added in 1877. It consists of the high department held in the new building at Adhiwál (half way between the old city of Jhang and the civil station of Maghiána), and situated about one-and-a-half miles from the main building at Jhang, where the middle and primary departments are taught. The three departments are under the superintendence of one Head-Master, and are taught by 13 other teachers in English, Vernacular, Mathematics, and Hindi. There are no lower Primary branches of the Jhang District School. The expenditure, number of pupils, and results of examinations, for the last five years, are shown in the accompanying table :—

Year.	Expenditure.	No. of boys.	*Pass results of examinations.*		
			Middle School.	Calcutta Entrance.	Punjab Entrance.
	Rs.				
1878-79	7,601	248	5	..	..
1879-80	7,720	270	1	3	..
1880-81 .. .	8,164	270	12	2	9
1881-82	7,717	263	6	.	7
1882-83	7,249	286	18	1	..

Medical.

Table No. XXXIII gives separate figures for the last five years for each of the six dispensaries of the district, which are under the general control of the Civil Surgeon, and which are now classed as follows:—

A civil hospital at Maghiána providing forty-two beds, under charge of an Assistant Surgeon.

A first-class dispensary at Chiniot, providing twenty-four beds, under charge of an Assistant Surgeon.

A second-class dispensary at Ahmadpur, providing fourteen beds, under charge of a Hospital Assistant.

A second-class dispensary at Shorkot, providing twelve beds, under charge of a Hospital Assistant.

A second-class dispensary at Kot Isá Sháh, providing six beds, under charge of a Hospital Assistant.

A third-class dispensary at Jhang, under charge of a local native doctor. This is about two miles from Maghiána where there is a civil hospital.

People freely resort to the dispensaries. There are no good *hakíms* or *vaids* in the district. All the dispensaries of this district

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Land and Land Revenue.

Medical.

are entrusted, to a great advantage to the people, with the vaccination of their own respective towns as well as of the villages lying within five miles of them. Vaccination in the interior of the district is carried on by six vaccinators, one of whom acts also as a supervisor. Vaccination in this district has become very popular, and some few families have adopted it as an obligatory household institution. The civil hospitals at Jhang and Chiniot were founded in 1859 and 1872, respectively.

Ecclesiastical.

There is a small church at Jhang, capable of seating some 36 persons. No Chaplain is posted there ; but the Chaplain at Mooltan occasionally visits the station, and holds service in the church.

Head quarters of other departments.

The Executive Engineer, Mooltan, is in charge of the principal public buildings of the district; he is subordinate to the Superintending Engineer, 1st Circle, Ráwalpindi. The Post Offices are controlled by the Superintendent of Post Offices, Deraját Division, residing at Dera Ismáil Khán. The Forests, *rakhs*, are under the Deputy Conservator of Forests, Punjab, Gújránwála Division, whose head-quarters are at Gújránwála.

SECTION B.—LAND AND LAND REVENUE.

Sikh system, and early settlements.

Some details regarding the Sikh revenue administration have already been given in Chapter II, pages 36, 37, 38, while their fiscal system has been described in the section treating of tenures (pages 72-78). Before the year 1831, when the Mooltan province was entrusted to the management of Sáwan Mal, Jhang can scarcely be said to have had any fiscal history. The Siál chiefs of Jhang apparently took in kind one-quarter of the produce upon much the same lines as Sáwan Mal did. The story that there were 125,000 wells at work during the reign of Walídád Khán, and that all the assessment taken was only Re. 1 or a blanket per well, is probably a mere myth. Walídád, no doubt, did, by moderate assessment and fostering measures, give a great impetus to cultivation, but it is doubtful whether his collections were of that exceeding mildness for which they are given credit.

Sáwan Mal's administration.

Of the administration of Sáwan Mal Mr. Monckton wrote :—

" After the breaking up of the Mughal empire, the southern portion of the Punjab appears to have fallen under the rule of petty Muhammadan chiefs. Ranjít Singh, on conquering the country, made over the administration to a Hindú named Sáwan Mal. He organised afresh the revenue system, and fixed the tax on the land actually under cultivation according to the nature of the crop grown. It was simply an excise on agricultural produce, levied in the form of an average tax in money or a fixed proportion in kind, according to the choice of the zamíndár. On first class crops, as tobacco, sugar, poppy, money rates were invariably charged, and no option was allowed. Fallow land and fodder crops escaped tax entirely, as also corn ate down green by cattle engaged in agriculture. Persons desirous of embarking capital in the construction of new wells or the repairs of deserted ones were encouraged by the grant of leases for periods of 20 years on a fixed cash payment of generally Rs. 12. This lease, however, only protected a

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Land and Land Revenue.

Sáwan Mal's administration.

limited extent of land, usually 20 acres (20 *bígahs?*), and did not cover first-class crops from the special taxes to which they were held subject under all circumstances. Special indulgence to encourage the investment of capital on agriculture was also bestowed in the form of *inám taradddadànà*, which may be translated as 'grants in reward for cultivation;' *e.g.*, a man of wealth and influence would engage to sink eight new wells and found a village, on condition of receiving in rent-free tenure, one well. But as it was found that the cultivation of this well was unduly increased to the detriment of the public revenue, the *jhol* tenure was introduced. By this the grantee was entitled to claim exemption for no particular well, but for a rateable deduction on all his wells, and in the case we have supposed would receive a remission of one-eighth on all his land."

Sáwan Mal took both in cash and kind. Collections in kind were almost invariably made by *Kankút* appraisement. Nominally the Government share of the produce was half the proprietor's share of the produce, the latter being almost invariably one-half. This does not mean that the Local Government never took more than one-fourth. The appraisement of the one-fourth crop was made by Government servants, and there was nothing to prevent their over-estimating the Government share of the produce until it became really half produce, or more. It was in this way that the Sikh Government never allowed any middleman between itself and the actual cultivator of the soil. Very often the only limit to public taxation was the inability of the cultivator to pay more. The following are a few instances of the cash rates paid *per bígah:*—wheat Re. 1-12 to Rs. 2; barley Re. 1 to Rs. 2; tobacco Rs. 8; cotton Re. 1-12 to Rs. 2-12; Indian corn Re. 1 to Rs. 2; *jowàr* Re. 1 to Rs. 2; *sarshaf* Rs. 2 to Rs. 5. Besides these rates there were a host of fees and cesses known as *abwàb*, taken in addition. The following are some of the more important:—*Iktàla*, an extra seer, the 41st taken in the maund; *wazn kashì*, *tikh* and *mukaddamí*, cash payments per well at each harvest; *karàwa and mohassúl*, the pay of the man who watched the crop in the interests of the *Sarkàr*. Fines were also continually levied. The only persons who were safe from these exactions were persons from whom nothing could be squeezed. Liberal remissions were, however, allowed for crops that did not mature or turned out very patchy, under the name of *khàràba*. The revenue system of Sáwan Mal was essentially fluctuating. It adapted itself to the vicissitudes of the seasons. Whether the harvest was good or bad, enough was left over to the cultivator to live upon. In itself the demand was heavy, but its elasticity prevented it from becoming oppressive. Under a good Sikh Governor the cultivator of the soil was looked upon as a Government tenant with certain rights of occupancy. So long as he went on cultivating his land and allowing himself to be annually squeezed, the State took great care of him, and was always ready to assist if he got into difficulties either through loss of cattle or with the village *baniah*. Ejections, except at the order of the Kárdár, were unknown, and the Kárdár seldom exercised the power. Whether a well paid revenue in cash or kind, the collection was suspended as soon as it fell out of work, and, on the other hand, new wells were at once brought on the rent roll. All the protection allowed to a new

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Land and Land Revenue.

Sáwan Mal's administration.

well was a remission of ⅛th. In the case of *sailàb* lands it was usual to exact a *nazràna* payment from the applicant who wished to obtain a grant of land for purposes of cultivation. In sanctioning these grants not the least respect was paid to old proprietary rights, if such existed. The valley of the Chenáb in Sáwan Mal's time was in many parts an impenetrable *jangal*, and there are so many riverain villages whose foundation dates from that time, that no rights of individual property could have existed. Men of influence obtained for the payment of a small sum the exclusive right to cultivate large blocks of land, and these grants have now become villages. The State took her share of the produce as soon as the land commenced to bear crops. It is rather difficult to form any very clear idea as to the degree of the severity of the Revenue demand in Sáwan Mal's time. It varied with the mood of the local Governor. Múl Ráj, who was for some time in charge of Jhang, was most tyrannical and oppressive in his exactions. The rule of the other Kárdárs was milder. The greater prevalence of *hàthrakhàn* tenures around Jhang shows that the demand was heavier close by the head-quarters of Government than elsewhere. In the more remote parts of the district it was perhaps more difficult to enforce a heavy demand and less was taken. The worst point of the Sikh rule in the eyes of the agriculturist was that the Kárdárs never hesitated to impose arbitrary fines, whenever they found that a man had contrived to save money in spite of the land revenue demand.

The Kálowál *ilàka* under Guláb Singh.

The only portion of the Jhang district not included in the Mooltan province was the Kálowál *ilàka*. Here Rájá Guláb Singh was generally the farmer of the revenue, though Sáwan Mal held the farm for one or two years. Mr. Ouseley thus describes the Revenue Administration :—" They collected their revenue by " *batài* (division of the harvest when reaped and threshed), or by " *kankút* (appraisement of the standing crops), or by underleasing " a few villages here and there for a certain cash payment to some " person possessing a little local influence, who again made his own " arrangements for collecting his rents according to one of the above-" described modes. As the principal lessee held his lease subject " to renewal annually, of course any contracts entered into by him " were only for a similar period." The fiscal administration of Rája Guláb Singh is still execrated by the people as the acme of extortionate taxation. The instance of his rapacity that they are most fond of quoting, is his device of taxing, not the land, but the plough bullocks at the rate of Rs. 25 a yoke. The consequence was that the people abandoned their holdings and the land became desolate. But the tax-collectors showed themselves equal to the occasion, and if they found that the cultivators of a well had fled, they promptly ascertained who the *kamíns* were, and fleeced them.

The first Summary Settlement of Mr. Cocks.

The first Summary Settlement of the tract now included in the Jhang Settlement was made by Mr. Cocks in 1847-48, the *ilàkàs* of Garh Máhárája and Ahmadpur being excepted. This was before annexation. The statement on the opposite page gives some statistics of the first Summary Settlement.

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The first Summary Settlement of Mr. Cocks.

Tahsils.	Wells at work.	Cultivation.	Jama.
			Rs.
Chiniot	Statistics	wanting.	82,863
Jhang	3,490	75,149	1,21,519
Shorkot	2,117	37,615	68,356
Total ..	..	..	2,72,738

The only really trustworthy figures are those of the *jamas*. Mr. Ouseley says :—"The assessments were based on the Sikh returns, on which a reduction of 20 per cent. was allowed." Mr. Monckton writes:—"The *jama* was assessed on a reduction of from 10 to 15 per cent. on the previous average collections." "So impressed," says Mr. Monckton, "were they with the mild and "liberal views of English administration, that the great majority "cordially sided with us in the contest with Múl Ráj and the "insurgent Sikh chiefs, which occurred shortly after."

Mr. Cocks' assessment was undoubtedly, judged by the cash assessments of to-day, both severe and heavy. It was paid for two years because prices were high. Then came the Mooltan rebellion. Peace was, however, restored in a short time, and with tranquillity came an enormous fall in the value of grain. The prices of wheat were as follows, in seers per rupee :—

1844	... 29	1849	... 25
1845	... 30	1850	... 38
1846	... 33	1851	... 48
1847	... 33	1852	... 63
1848	... 37	1853	... 62

The assessment of no district, however fertile, could bear up against two such forces as these, the assessment being inherently severe. The inapplicability of our revenue system to the Jhang district, no doubt, had some share in rendering the payment of Mr. Cocks' assessment impossible, but it was not the chief factor, or its influence would have been felt sooner. For 1848 and 1849 the collections were made without difficulty. In 1850 a few balances remained. "But towards the close of 1851, a great cry of distress "arose throughout the district, and it was considered absolutely "necessary that a remission of the demand should be at once "effected. The distress was greatest in the Kálowál tahsíl."

The second Summary Settlement.

The second Summary Settlement was made by Major Hamilton and Mr. Monckton in Jhang, and in the Kálowál *ilàka* by Mr. Ouseley. The demand for the Kálowál tahsíl was first revised by Mr. Thornton, the Commissioner, at the close of 1851, and a reduction of 25 per cent. given, and again in 1853 by Mr. Ouseley. It is Mr. Ouseley's figures that are given here. The results are tabulated below :—

Tahsils.	Wells.	Cultivation.	Jama.
			Rs.
Chiniot	No Sta	tistics	61,246
Jhang	3,296	49,942	1,02,856
Shorkot	1,903	29,911	58,988
Total	..	..	2,23,092

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Land and Land Revenue.

The Second Summary Settlement.

The reduction given amounted to 18 per cent., or roughly speaking to half a lakh out of 2¾ lakhs. The revision of the first Summary Settlement was commenced by Major Hamilton, who took up first the cases of villages that needed more immediate attention, and finished by Mr. Monckton. In Kálowál, when the first Summary Settlement had broken down utterly, the revision was effected in three days by the Commissioner, Mr. Thornton, and the demand reduced from a lakh to Rs. 75,000. "This assessment was, humanly speaking, the means of speedily restoring an almost ruined and deserted tract of country to a flourishing condition." In 1853 Mr. Ouseley again revised the Kálowál Settlement, which resulted in a further decrease of Rs. 12,000 in the tahsíl revenue, *i.e.*, from Rs. 75,617 to Rs. 63,738. The revised assessments were collected with ease until the Regular Settlement.

The Regular Settlement.

Jhang.

The Regular Settlement of the Jhang district was at first entrusted to Mr. Morris, but in April 1854 Mr. Monckton took charge of the Settlement, and he remained in charge until the conclusion of operations in the early part of 1857. The first business of the Regular Settlement was the determination of what land belonged to the State and what to individuals, and the demarcation of the tract belonging to individuals into villages. There were apparently no disputes and no difficulties in defining the boundaries of the Government waste. The zamíndárs, instead of meditating encroachments on the State lands, in many instances threw up land that undoubtedly belonged to them, so fearful were they of the responsibilities that had hitherto attached to proprietorship of land. The adjustment of the village boundaries was a work of some magnitude not unaccompanied with difficulty. The state of proprietary right as existing at annexation, and the effect of this demarcation in bestowing proprietary right on the villagers in waste lands now included within their village, have already been described in Chapter III. The principles upon which the assessment circles were arranged were uniform for the whole district. The tract under assessment was everywhere a narrow strip of land lying between a river and the high lying uplands of the Bár or Thal. Cultivation was easiest and least expensive near the rivers, most laborious and requiring most capital in the uplands alongside the Bár or Thal. Consequently the riverain villages were collected into one circle, and those under the Bár and Thal into another. What villages remained situate between these two were formed into a third or intermediate circle. The names of the circles were River or "Hithár," Centre or "Wasat," and Upland or "Bár." For each of these circles the different rates of assessment shown on the opposite page were framed for the three descriptions of soils—*chàhi, sailàb*, and *bàrâni*—classed according to the sources from which each obtained the moisture necessary for the growth of crops. There were no distinctions between *chàhi, chàhi-sailàb, chàhi-jhalàrì*, &c.

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The Regular Settlement, *Jhang.*

Tahsil.	River.			Centre.			Upland.		
	Chahi.	Sailab.	Barani.	Chahi.	Sailab.	Barani.	Chahi.	Sailab.	Barani.
	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.	Rs. A.
Chiniot ..	1 6	1 6	0 8	1 2	1 2	0 8	0 14	0 14	0 8
Jhang .	1 8	1 0	0 8	1 6	0 14	0 8	1 2	0 10	0 8
Kadirpur { Chenab	1 2	1 0	0 8	0 10	0 10	0 8	} 0-11	..	0 8
Kadirpur { Jhelam	1/8—1/6	1 2	0 8	0 14	0 14	0 8			
Uch ..	1 6	1 0	0 8	1 0	0 14	0 6	0 13	0 13	0 8

The financial results of Mr. Monckton's Settlement, classified tahsíl by tahsíl, according to existing arrangements, are given below :—

	Chiniot.	Jhang.	Shorkot.	Total.
	Rs.	Rs.	Rs.	Rs.
Jama	33,995	1,13,246	58,147	2,05,388
Incidence on cultivation,	0-15-8	1-1-2	1-1-0	...

The Regular Settlement, *Kàlowàl.*

The Regular Settlement of 113 villages in the Chiniot tahsíl on the right bank of the Chenáb was made by Mr. Ouseley. The Settlement was commenced in 1854. The first step was the demarcation of boundaries. This business was effected without trouble in the well-cultivated tracts, but was attended with great difficulties in the Bár. It is not necessary to notice the obstacles with which Mr. Ouseley had to contend in the demarcation of the boundaries of the Bár villages, as all the Bár round Kirána, that was transferred to Jhang in 1861 has become, it is not known exactly how, Government property. It was an integral portion of the Jhang district land revenue and *tirni* system, that all the waste lands in the Bár were the property of Government, and naturally the Jhang officials saw no reason for treating the Kirána Bár in a different manner. A great part of the tract transferred was unclaimed Government waste, and in respect of the portions claimed by individuals it was argued that no proprietary rights had as yet been conferred, and that there were no reasons why these claimants, who mostly belonged to the villages nearer the river and were mere temporary squatters in the Bár, should be regarded as having other or greater rights than their brethren in the Sándal Bár. The result was that as in the Sándal, so in the Kirána Bár, no private rights of property whatever were recognised in 1861. The inhabitants of the tract transferred were charged with *tirni* and allowed to graze throughout the Bár that was included within the Jhang district. Soils were classed as *chàhi, sailàba,* and *bàrànì.* Well-irrigated lands were further divided into *chàhi-khàlis,* land irrigated *only* by wells, and *chàhi-sailàb,* land irrigated by wells but also subject to inundation from the river. An estimate was then made of "what "was the minimum outturn of a bad *bìgah* of *chàhi* land in the best "assessment division." The usual cesses were then deducted and one quarter of the remainder assumed to be the Government share. This share was converted into a money value and a produce rate

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The Regular Settlement. *Kalowal.*

per acre obtained. Thence the revenue rates for the circles were deduced. The classification of villages with regard to their facilities of irrigation was in Kálowál confined to two divisions, into Hithár and Nakka. The revenue rates are subjoined :—

Tahsil.	Assessment Circle.	Rate per Acre.			
		Chahi-Sailab.	Chahi-Khalis.	Sailab.	Barani.
		Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
Kalowal.	Hithar 1st class	2 4 0	1 12 0	1 8 0	..
	Hithar 2nd class	2 0 0	1 8 0	1 4 0	..
	Nakka	..	1 12 0	..	0 8 0

In actual assessment Mr. Ouseley went far below his rates. The 113 villages were assessed with a *jama* of Rs. 33,476, falling on cultivation at the rate of Rs. 1-2-10 per acre.

First Summary Settlement of Garh Máhárája and Ahmadpur *taalukàs*, by Mr. Wedderburn.

It has already been explained why the *ilàkàs* of Garh Máhárája and Ahmadpur were not settled by Mr. Cocks. They were first summarily settled by Mr. Wedderburn in 1850. His assessment was in Garh Máhárája 21 per cent., and in Ahmadpur 16·7 per cent. lower than the collections of past years, and amounted to Rs. 30,452. In spite of the reductions given on previous collections in kind, the assessment was extremely severe. In Ahmadpur the previous collections were very heavy. The *taalukà* was originally held in *jàgìr* by Imám Sháh who "had the character of being "very exacting with the *ràìats*, and laid on a variety of cesses in "addition to the *batài*, which was itself heavy." When the *jàgìr* was resumed it was included in Sáwan Mal's farm, and he "was "not the man to make reductions, so all the cesses and heavy rates "were retained." Mr. Wedderburn's Settlement continued in force until 1857, when Captain Graham was deputed to revise it. Some revisions of the demand had taken place between 1850 and 1857, and the *jama* in the latter year of these two *taalukàs* amounted to Rs. 30,268.

The Second Summary Settlement, by Captain Graham.

The result of the revision by Captain Graham, known as the Second Summary Settlement, was an enhancement of the *jama* to Rs. 32,460. The whole of the increase except Rs. 53 was taken in Garh Máhárája. A Settlement enhancing the demand of a previous heavy settlement could have but one end. It broke down in a year-and-a-half.

The Third Summary Settlement, by Captains Tighe and Maxwell.

The Summary Settlement of Captain Graham was again revised by Captains Tighe and Maxwell. The new assessments gave a decrease of Rs. 3,485 = 10·7 per cent. on the *jama* of the Second Summary Settlement. This Third Summary Settlement worked extremely well, and when the Fourth Summary Settlement was made in 1862, the measurements of that year showed a large increase in the cultivated area and in the number of wells at work.

The Fourth Summary Settlement, by Major Dwyer.

In 1861 these two *taalukàs* were transferred from the Muzaffargarh to the Jhang district, under instructions conveyed in the Financial Commissioner's No. 1832 of 29th April 1861. At the close of 1862 the preparation of a Record of Rights for the villages of these two *taalukàs* was commenced. The old assessment was also

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once more revised. The assessment is generally known as that of Major Dwyer, but the Assessment Report was sent in by Major Lane in 1865. The new assessment which remained in force until the assessment lately announced, gave a further reduction of Rs. 473. Its incidence on the cultivated area fell at a little less than Re. 1 per acre. The *jama* was on the whole moderate, but in several villages the assessments were heavy.

Summary of the Garh Mahárája and Ahmadpur assessments.

The following tabular statement gives the more important statistics of the five revisions of assessment that these two *taalukàs* have undergone since annexation :—

Year.	By whom made.	Wells.	Cultivation.	Jama.
1850 ...	Mr. Wedderburn's ...	723	14,934	30,452
1850-57	Ditto Revised...	No	details.	30,268
1857 ...	Captain Graham's ...	719	20,296	32,460
1859 ...	Captain Maxwell's ...	740	20,296	28,975
1862 ...	Major Dwyer's ...	915	28,548	28,502

Summary of the assessment in force when the Revised Settlement commenced.

Thus, of the district as it at present exists, the assessments which were to be revised when the recent re-settlement was undertaken stood as follows :—

	Mr. Monckton.	Mr. Ouseley.	Major Dwyer.	Total.
Villages ...	644	113	39	796
Assessment ...	2,05,389	33,476	28,502	2,67,367

Of the three assessments that of Mr. Ouseley was undoubtedly the most heavy, and that of Major Dwyer the lightest. Mr. Monckton's was, with a few exceptions, an exceedingly fair assessment, both in the interests of Government and the people.

The results and working of the Regular Settlement.

The First Regular Settlement of the district has been eminently satisfactory, and the results are everything that could be wished. With the exception of some temporary remissions and revisions of assessment in a few villages in the Shorkot Kachhi, and some isolated instances of over-assessed upland villages in that and the other tahsíls, there has been no occasion for correction of the work of the three Settlement Officers. The enormous improvement that had taken place in agricultural assets and resources by the time the Revised Settlement commenced is clearly set forth with due detail in Mr. Steedman's report on that Settlement. In fac t, improvement seems to have set in almost immediately Mr. Monckton finished his work, and in 1857 "the agriculturists of "the Jhang district were contentedly fulfilling their engagements "with the State, and steadily pursuing their ordinary avocations, "while the adjoining district of Gugera was in a full blaze of insur-"rection, and the nomad tribes of the intervening Bár *jangal* were "sacking the frontier *thànas*. The pastoral tribes on the other "side in the Sháhpur district were showing at the same time a "warlike spirit; and had not the memory of days of license under "the Sikh rule been succeeded by better feelings among the

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"Muhammadan population of this district, a serious revolt in the "southern provinces of the Punjab must have been added to the "many lesser complications arising from the mighty struggle then "in progress throughout upper Hindustán."

Revision of Settlement of 1880.

The Settlements described above were revised by Mr. Steedman between 1874 and 1880. His assessments are fully described in the following pages, which are taken from his Settlement Report :—

Assessment Circles

The tract under assessment is composed of the Jhelam and the Upper and Lower Chenáb valleys, hemmed in on either side by the high-lying plateaux of the Sándal and Kirána Bárs and the Thal, and a few villages on the banks of the Rávi. The primary classification that at once suggested itself was of villages on the river bank, and villages in the uplands. It was further found convenient to arrange the villages on the left bank of the Chenáb from the Gujránwála border to the Rávi, and also those on the left bank of the Jhelam, into the three divisions of River, Centre, and Utár or Bár. On the right bank of the Chenáb it was deemed neither necessary nor convenient to have two divisions of the upland villages. A set of villages, fourteen in number, lying west of the Chenáb on either bank of the Halkiwáh Nála, an inlet from the river, formed an exception. This tract is a natural basin between the higher lands of the River circle villages to the south, and the Utár lands on the north. The soil is flooded by the overflow of this Nála, and is so good, and its agricultural produce so much more valuable than on the upland wells, that the villages could not well be included in the Utár circle, while they were too far from the river to be classed with the river villages. In the country lying west of the Jhelam and Chenáb in the Sind Ságar Doáb, the separation of the Kachhí villages into two divisions was unnecessary. The names of the circles are given below :—

Tract.	No.	Assessment Circles.
Between the Chenáb and Sándal Bár	1	River or Hithár.
	2	Centre or Wasat.
	3	Upland or Bár.
Between the Chenáb and Kirána Bar	1	River or Hithár.
	2	Halkiwáh.
	3	Upland or Utár.
Between the Jhelam and Kirána Bár	1	River or Hithár.
	2	Centre or Wasat.
	3	Upland or Utár.
Between the Jhelam and Jhelam-Chenáb and Thal	1	River or Hithár.
	2	Upland or Kachhí.

Classification of soils, and revenue rates adopted.

The villages having been thus arranged into circles, the second step was to fix revenue rates for each description of soil in each circle. The three main soil divisions are *chàhi* irrigated by wells, *sailàb* naturally irrigated by river floods, *baràni* dependent on rain alone. There are several sub-divisions of well-irrigated land which are given below with their vernacular names :—

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Classification of soils, and revenue rates adopted.

Vernacular name.		*English equivalent.*
Cháhi-Khális	Irrigated by	Well alone.
Cháhi-Sailáb		Well and river flood.
Cháhi-Naihri		Well and canal by flow.
Cháhi-Jhalári		Well assisted by a *jhalàr*, permanent or temporary.
Jhalári		*Jhalàr* alone.

The inundation canals of this district are only found in one tahsíl and are of rough construction. Lands irrigated by canal flow have always been assessed at the same rates as *sailàb* lands.

Rain lands assessment.

Baràni or rain-lands. One assessment rate only has been used throughout the district, 8 annas an acre. The only important rain cultivation is in the northernmost corner of Chiniot, in the Nissowáná villages adjoining Sháhpur. Here Mr. Steedman assessed considerably above his rates. In other portions of the Chiniot tahsíl the rate itself was taken; but in Jhang and Shorkot he practically put no assessment on *baràni* cultivation. It was thrown in with the well assessment. Where the assessment was fluctuating on wells it was necessarily not assessed. The total *baràni* area in the district under cultivation shown in the returns is 3,480 acres.

The assessment of *Sailàb* lands.

River-flooded land—*Sailàb.* The assessment rates used are given below in tabular form for the rivers and tahsíls :—

RATES SANCTIONED FOR SAILAB LANDS ON THE

Chenáb.			Jhelam.	Rávi.
Tahsíl Chiniot.	Tahsíl Jhang.	Tahsíl Shorkot.	All Tahsils.	Tahsíl Shorkot.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
0 12 0	0 15 0	1 0 0	1 0 0	1 0 0

For an unimportant *sailàb* and *naihri* area included in villages not in the river circles lower rates given below were sanctioned in Jhang and Shorkot :—

Jhang.			Shorkot.	
Centre Chenáb.	Utár Vichanh.	Kachhi.	Bár.	Centre Chenáb.
Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A. P.
0 12 0	0 8 0	0 12 0	0 12 0	0 13 0

The reason for reducing the rates in these circles was that the *sailàb* lands, being more distant from the stream, were less certain of being annually flooded than land of the same description in the riverain villages.

The suitability of a system of fluctuating assessment for *sailab* lands.

Before attacking the rates themselves, the preliminary point, one of some magnitude, whether the *sailàb* lands should be assessed on a fluctuating system or not, had to be decided. Eventually a fixed assessment for the *sailàb* lands of the Chenáb and Jhelam, and

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a fluctuating assessment for the Rávi villages were sanctioned. On this subject Mr. Steedman writes :—

The suitability of a system of fluctuating assessment for *sailáb* lands.

"In the case of the Jhelam villages a fixed assessment is undoubtedly the right system. They are exposed to more danger from over than under-flooding. With reference to the Chenáb, I am not so certain that my recommendations were the best possible. I mean that there are certain villages whose futures seem less roseate and promising than they did two or three years ago. Nevertheless, considering the exceedingly light rate at which it was proposed to assess the *sailàb* lands, I think that the assessment should be fixed, not fluctuating. For the Jhelam and the lower Chenáb *sailàb* I have no anxiety. I think the fixed assessments will work well, with a little management on the part of the district authorities. The assessment on the Upper Chenáb in Chiniot is so exceedingly light that the occurrence of a bad harvest or a failure of flood ought not to have any serious effects. In Jhang the outlook is not so reassuring. I think a good deal might be done to ensure a flooding to villages in the river circles by opening out old channels, and assisting the people to throw up embankments to flood their lands. Suspensions of demand should also be liberally allowed. Two bad years rarely come together, and in a good year the *sailàb* lands might pay half as much again as the assessment without difficulty. There are five villages who have applied for a fluctuating assessment, and it has been sanctioned for Bindi Máhni in Jhang, and Badh Rajbána in Shorkot. In the future I would give all other villages, upon whom a fixed assessment pressed heavily, the same system."

System adopted in assessing wells.

The assessment of well-irrigated lands was a far more difficult matter than the assessment of *sailàb* lands. In the Chiniot tahsíl the wells in all circles were assessed by an average rate on cultivation. The same method was observed in the assessments of the river circles of the other two tahsíls. In the Centre-Jhelam circle of tahsíl Jhang and the Centre-Chenáb circle of tahsíl Shorkot the assessments were framed partly by a well, and partly by an acreage rate. In the remaining circles of the Bár and Káchhi, in both tahsíls, where a system of fluctuating assessment on wells has been introduced, and in the Utár Vichanh and Centre-Chenáb circles of tahsíl Jhang, the assessment unit has been, not the acre, but the well.

The well assessment in river villages.

The rates used in the river circles are given below :—

Tahsíl.		Acreage rates for well lands.						Average well rate.	Average rates on Jhalári.		
		Cháhi-sailáb, &c.			Cháhi-Khális.						
		Rs.	A.	P.	Rs.	A.	P.	Rs.	Rs.	A.	P.
Chiniot		1	4	0	1	4	0	34	..		
Jhang	Chenáb	1	6	0	1	5	0	24	1	2	0
	Jhelam	1	6	0	1	5	0	27	..		
Shorkot		1	6	0	1	4	0	24	1	4	0

In Chiniot the revenue rate sanctioned for the Halkiwáh circle was nominally Rs. 1-6-0, but practically the assessments were made with a very much lower rate, as the actual assessment was 10 per cent. below the rates' *jama*.

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The upland well rates.

The rates sanctioned and used for the assessment of upland wells are given in a tabular form below—

Tahsil		Detail.	Circles.			
			Centre.	Bar.	Utar.	Kachhi
			Rs. A. P.	Rs. A. P.	Rs. A. P.	Rs. A P.
Chiniot		Per acre	1 2 0	0 14 0	1 1 0	
		Per well	30 0 0	24 0 0	32 0 0	..
Jhang	Chenab	Per acre	1 6 4	1 0 2	0 12 0	
		Per well	23 0 0	17 0 0	18 6 0	..
	Jhelam	Per acre	1 4 0	..	.	1 1 7
		Per well	26 0 0	..	..	17 0 0
Shorkot		Per acre	1 6 0	1 1 3	..	1 0 5
		Per well	19 0 0	16 12 0	.	16 0 0

The system of fluctuating assessments on wells, introduced in the Bár and Kachhi circles of Tahsils Jhang and Shorkot.

The difference in the conditions of agriculture on the upland wells as compared with those near rivers has been noted, together with the fact that in the Bár and Kachhi circles of Jhang and Shorkot a system of assessment, fluctuating with the number of wells at work at each harvest, has been introduced. The nature of this fluctuating assessment and the reasons for its introduction are given in the following paragraphs :—

"The condition of agriculture in both the Bár and the Kachhi circles is one of extreme uncertainty. Cultivation is expensive. *Takàvi* advances are universal. Tenants are poor and migratory. The harvests depend upon the rainfall, and bad harvests are frequent. Not very much rain is required, but it must be seasonable. Large quantities of fodder crops have to be grown, as no grass, or none to speak of except *sar*, is produced in the tract. Add to this that many well lands have a tendency to deteriorate after a few years' cultivation, and another and important element of uncertainty is introduced. These are the facts that first drew my attention to the need of some system of assessment more elastic than that of a fixed cash revenue, which while liberally allowing remission to impoverished villages would also recoup the Government for such losses of revenue by taxing at a light rate new wells and new cultivation.

"The system adopted is as follows: A *jama* for each village has been announced in the ordinary way and distributed by *bàchh*, over the wells in cultivation. The *jama* assessed on each well will be paid by the proprietors thereof so long as the well continues to work. If the well falls out of work a remission will at once be given, dating from the harvest after the well ceased working. *There will be no measurements of the crop area year by year.* If there is a crop of any description, however poor it may be, the well owner will be liable for the full instalment of the harvest at which that crop is reaped. When a well assessed at this Settlement subsequently falls out of work, and is afterwards again brought into cultivation, the *jama* assessed on the well at the original *bàchh* will be at once reimposed. This disposes of wells assessed at Settlement. New wells will be allowed to remain revenue-free for three years, after which they will come under assessment. For old wells repaired, one year's grace will be ample. All new wells in any given village after the expiry of the period of grace will pay at a uniform well rate, fixed by the Settlement Officer and announced by him with the other *jama*, and generally about $\frac{1}{5}$th lower than the average incidence per well of the announced village *jama*. The assessment on a new well will be remitted at once on its falling out of cultivation, and at once reimposed when again put to work."

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System of fluctuating assessments for river lands.

The system of fluctuating assessments on wells has just been described. In river villages there are two phases of the system. In one, the well estates in which wells are at work are given a fixed assessment, and all the area outside the well estates under fixed assessment is held to be under a fluctuating assessment. The cultivation in the portion under fluctuating assessment is measured up annually and assessed at fixed village rates. On the Ráví different rates for lands irrigated by *jhalárs* and for pure *sailáb* lands were framed, as there is a considerable amount of *jhalári* cultivation in the villages which is much more valuable than *sailáb*. The sanctioned rates were Re. 1-4 for *jhalári* and Re. 1 *sailáb*. The other phase is where the whole village area is placed under a fluctuating assessment, and the cultivated area measured up year by year and assessed at one rate, that for *sailáb*. If there are any wells at work, a fixed sum to be paid annually in addition to the fluctuating assessment is imposed upon them, calculated to represent the difference between the irrigated and unirrigated *sailáb* rate. For instance, there are 10 wells with an area of 200 acres of *cháhi* cultivation. At Re. 1-4 per acre the assessment amounts to Rs. 250, but at Re. 1, the *sailáb* rate, the demand only amounts to Rs. 200. The difference constitutes the fixed *ábiána* to be levied on the wells. This *ábiána* is fixed, and is paid annually in addition to the demand given by the rate on the cultivation of the year. In addition to the Ráví villages and the two villages in the Halkiwáh circle of Chiniot, Míanwálí and Changránwála, a few villages marginally noted, in the Hithár Chenáb circle of tahsíl Jhang, have applied for a fluctuating system of assessment.

Zinda Sháh.
Siálánwála.
Dádúwána.
Bindi máhni.

Date assessments.

There are no date assessments in Chiniot, as the palms are few and nowhere found in sufficient number to be worth assessing. The number of palms and the assessment, for the old and the new settlements are given below:—

Tahsíl.	The Regular Settlement of 1856.				The Revised Settlement of 1880.			
	Female.	Male.	Small.	Jama.	Female.	Male.	Small.	Jama.
Jhang	28,060	21,673	111	903	39,348	25,591	61,885	1,637
Shorkot	20,992	12,212	11,218	1,176	22,233	15,059	23,229	1,450
District	49,052	33,885	11,329	2,079	62,581	40,650	85,114	3,087

The rates used in the assessment were 1 anna per female in Shorkot and in Jhang, 9 pies in the villages on the Jhelam, and 6 pies in those on the Chenáb. In Jhang there are very few trees on the left bank of the Chenáb. On the right there are some groves. Most of the assessed palms are in villages on the Jhelam. Date palms are found in most villages on the lower Chenáb. The dates of Shorkot and Mírak are the best. The outturn of fruit per tree varies considerably. A maund is the maximum. The retail price of dates also fluctuates greatly. The best Shorkot dates are worth Rs. 8 a maund, the worst Re. 1-4. The date crop is usually

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sold in the green, some time before it ripens. The proprietor thus escapes all risk, but obtains only half the price the dates will fetch at retail prices if the year is a favourable one. The purchaser takes the risks, and they are many. He is also liable for certain charges, the pay of the watchman at the rate of $\frac{1}{12}$th produce, *rakhái*, and the man who gathers the dates at the rate of $\frac{1}{16}$th, *charhái*. The great enemy of dates is rain. Early and continued rain rots them, and the whole crop is often lost. Estimating the average outturn of a palm at 16 seers, and putting the *rakhái* and *charhái* charges at $\frac{1}{8}$th, we have 14 seers left, worth 7 annas at Re. 1-4 a maund. Half of this is $3\frac{1}{2}$ annas, the Government share. But this rate cannot be taken because of the uncertainty of the crops ripening in good condition. The same palm never bears well two years running. A good crop every alternate year is as much as can be hoped for.

Half net assets estimate.

The statement below gives the figures of the half net assets estimate for the three tahsíls, also the same arranged in percentages in antique type:—

	Chiniot.	Jhang.	Shorkot.	District.
	100	100	100	100
Gross produce	10,89,545	14,19,045	9,81,959	34,90,549
	12	12	11	12
Deduct fodder	1,30,745	1,70,285	1,08 015	4,09,045
	88	88	89	88
Balance	9,58,800	12,48,760	8,73,944	30,81,504
Kamiána rate	19	16	17	·17
Kamiána	1,82,172	1,99,802	1,48,569	5,30,543
	69	72	72	71
Balance	7,76,628	10,48,958	7,25,375	25,50,961
Rate of batái	·42	·47	49	·46
	30	34	36	34
Net assets	3,26,184	4,93,010	3,55,434	11 74,628
Half net assets	1,63,092	2,46,505	1,77,717	5,87,314
Share of gross produce	15	·17	·18	·17
Actual assessments	96,708	1,51,072	1,09,597	3,57,377
Share of gross produce	089	·106	·112	·102

Why the assessments are below the produce estimate.

The reasons why we cannot take a cash revenue equal either to the half net assets estimate or to $\frac{1}{6}$th of the gross produce are these. In the case of wells the initial cost of construction, the expenses of maintenance, interest on *takávi* advances to tenants, insurance against the loss of the advance itself, losses from occasional failures of crops, have all to be considered in fixing the assessment, but cannot be accurately shown in the tabulated statement of a half net assets estimate. The share of the produce which the landlord gets varies from ·29 in Chiniot to ·36 in Shorkot. In Jhang it is ·34. The average is about ·33 or $\frac{1}{3}$rd. Now, if the Government demand is fixed at $\frac{1}{6}$th for the rain lands of the sub-montane districts, where there are no expenses whatever, or hardly any to the proprietor who takes $\frac{1}{2}$ *batái*, it is manifest that in Jhang, where the share of the produce that actually reaches the landlord's hands is only $\frac{1}{3}$rd, out of which much wear and tear of his capital invested in the wells, and advances to the cultivator

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has to be recovered, to take half net assets will be a much heavier assessment than in districts more favourably situated. This is the reason why we cannot take more than $\frac{1}{10}$th of the gross produce, equal to about $\frac{1}{3}$rd of the net assets.

Comparison between the assets and assessments at the Regular and Revised Settlements.

The district assets at last Settlement and now are compared below :—

	Area under cultivation.				Wells at work.	Yokes	Population.
	Chahi.	Sailab.	Barani	Total			
	Acres	Acres	Acres	Acres.			
Regular Settlement	190,883	60,347	1,773	253,003	8,710	33,872	2,50,736
Revised Settlement	227,299	98,748	3,480	329,527	11,018	45,754	3,17,266
Increase+ / Decrease-	+36,416	+38,401	+1,707	+76,524	+2,308	+11,882	+66,530
Percentage	+ 19	+ 64	+ 96	+ 30	+ 26	+ 35	+ 27

The statement subjoined gives the district assessments as they stood at last Settlement and as they stand now :—

	1st Summary settlement	2nd Summary settlement	Regular settlement.	Demand of last year	Present assessment.	Rate on cultivation.		
	Rs	Rs.	Rs	Rs	Rs	Rs.	A.	P
Chiniot	82 863	61,246	67,472	70,997	96,708	0	15	10
Jhang	1,21,519	1,02,858	1,13,246	1,22,243	1,51,072	1	1	11
Shorkot	98,808	91,448	86,649	91,117	1,10,087	1	2	5
District	3,03,190	2,55,552	2,67,367	2,84,357	3,57,867	1	1	2

Of the present assessment of Rs. 3,57,867, Rs. 39,910 is fluctuating, *viz.*, Chiniot Rs. 1,032, Jhang Rs. 12,882, and Shorkot Rs. 25,996. Deductions have also to be made on account of the 1 per cent. allowed to *zaildàrs* out of the Government demand, remissions granted to wells protectively leased, and on other accounts.

Instalments.

In Chiniot, with the exception of a few villages in the Halkíwáh circle, the instalments of the revenue are $\frac{2}{3}$rd *rabi*, and $\frac{1}{3}$rd *kharìf*. Half the *rabi* demand is payable on the 15th June and half on the 15th July. The whole of the *kharìf* instalment is paid on the 1st January. In Jhang and Shorkot the same ratio between the amounts of revenue payable at each harvest has been retained, and the *rabi* instalments fall due on the same dates as in Chiniot, but the *kharìf* demand is payable half on the 15th December and half on 15th January.

Cesses.

The cesses levied upon land revenue are shown below :—

			Rs.	A.	P.	
(1)	Local rates	@	8	5	4	per cent.
(2)	Road	@	1	0	0	,,
(3)	Education	@	1	0	0	,,
(4)	District Post	@	0	8	0	,,
(5)	Lambardárs	@	5	0	0	,,
(6)	Patwáris	@		.		,,

The one per cent. allowance made to the *zaildàrs* is a deduction from the revenue, and not a cess collected in addition to it.

Assignment of land revenue.

Table No. XXX shows the number of villages, parts of villages, and plots, and the area of land of which the revenue is

assigned, the amount of that revenue, the period of assignment, and the number of assignees for each tahsíl as the figures stood in 1881-82.

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Government waste lands.

As has already been stated, more than 60 per cent. of the total area of the district is Government waste. Over this large area rove numerous herds of camels and cattle; and from them is collected a grazing tax which is known in the Bár lands of the Punjáb as *tirni*. The *làna*, a plant from which the coarse barilla known as *sajji* is obtained, is annually leased out to contractors. Finally, permission is given to applicants to sink wells or cultivate drainage hollows in Government waste, and grants are made to them for that purpose. These are the three sources of the income derived from the Government Bár lands of the Jhang district. The management of this extensive property will now be described. Table No. XVII shows the area and income of Government estates; while Table No. XIX shows the area of land acquired by Government for public purposes. The forests have already been noticed in Chapter IV, p. 122.

Tirni arrangements in the Jhang district, and their early history.

The following account of the *tirni* tax has been collected from correspondence in the district office, commencing with the year 1851, and the subject is of such importance in the Jhang district that it is given here in full. The origin of *tirni* is not traceable farther back than the Afghán rule. Its introduction into every part of the Jhang district was not contemporaneous. When Sayadwála* was reduced by the Sikhs, the Kharals were called upon to pay a heavy tribute. As they had little or no cultivation the tax was distributed over their cattle. At the time of Kamar Singh this revenue amounted to Rs. 50,000 and in Kharrak Singh's reign to Rs. 35,000. Díwán Sáwan Mal introduced a new system. He caused an enumeration of the cattle to be made, and taxed each head by imposing the following rates :—Female camels, Rs. 2, male camels, Re. 1; milch buffaloes, Re. 1; cows, 6 annas. The tax first fixed at Rs. 32,000 was reduced in Sambat 1903 to Rs. 25,000 and subsequently to Rs. 18,000. In Jhang no *tirni* was levied by the Siál chiefs. It was first imposed by Suján Rai about 1813 A. D. His rates were—camels, female, Re. 1-8, male, Re. 1; cows, 4 annas; female buffaloes, 8 annas; goats and sheep, Re. 1-4 per hundred. The tax was fixed at Rs. 11,900, and 40 camels. When Sáwan Mal assumed charge of the Mooltan province, an enumeration was made, the female camel rate raised to Rs. 2, and a re-distribution of the quotas payable by the Sadr *tirni-guzàrs* effected. The tax was raised once, but in Sambat 1904 again fell to Rs. 10,000. At annexation the grazing rates were—

	Rs.	A	P.		Rs.	A	P.
Camels, female	1	10	0	Cows	0	4	0
,, male	1	0	0	Female buffaloes	0	10	0

Sheep and goats, Rs. 2 per hundred.

In Shorkot sheep and goats were not taxed. In Uch the *tirni* had long been leased with the land revenue. In 1904 Sambat the tax in Uch proper was only Rs. 1,820. In Chiniot

* Sayadwála was for a few years after annexation included in the Jhang district.

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Tirni arrangements in the Jhang district, and their early history.

tirni was first imposed by Jassa Singh Bhangi, and at first the collections amounted to Rs. 5,000 only. The tax was increased by Sáwan Mal to Rs. 10,000. Subsequently reductions were given, and it amounted in Sambat 1903 to Rs. 3,093 only, the *tirni* in a few villages being included with the land revenue. In Ranjít Singh's time Shorkot belonged to the Kharals. In Kamália *tirni* was first levied by Ranjít Singh, and was paid in kind, 1,100 camels. Subsequently a cash assessment of Rs. 23,000 was substituted. Sáwan Mal reduced the tax to Rs. 15,000. In Sambat 1904 the tax was only Rs. 11,078. The rates in this tract were higher than elsewhere, and calves were taxed.

Origin of *Sadr tirni-guzàrs.*

The origin of the *Sadr tirni-guzàrs* was as follows. During the Afghán rule and the earlier days of the Sikh *régime*, the population of the district appears to have been divided into bodies owing a kind of feudal allegiance to a number of small chiefs. These chiefs paid a portion of the *tirni*, but the larger share fell on their followers. When Sáwan Mal imposed his *tirni* tax, it was distributed among these chiefs, each taking the responsibility for his allotment. Actual collections were made by the chief from his adherents. Often there were two *Sadr tirni-guzàrs* for the body, made up of the clansmen of the chief, and other people his followers. The tax was collected irrespective of boundaries. Changes in these bodies, *angi* as they were called, by secessions and accessions of graziers, were constant. The cattle of the followers of any *Sadr tirni-guzàr* were not restricted to any particular portion of the Bár. Having paid his quota of the tax, the cattle-owner could graze his cattle not only through the whole of the Jhang Bár, but even in the waste of adjoining districts. *Tirni* was collected from him wherever he grazed by his own *Sadr tirni-guzàr*. If he went to another district, his name was transferred to the rolls of that district. Colonel Hamilton in 1851 thought it "impracticable to collect the tax from cattle grazing within defined limits," and "inexpedient to restrict cattle to any particular boundaries," and that "the only feasible system is that which has hitherto prevailed." Before annexation "the tax on "cows and buffaloes was only levied from owners who were strictly "cattle-feeders and not cultivators, and those of all *bonâ fide* culti-"vators were exempt. The cattle grazing in the river *belàs* were "taxed, unless they belonged to cultivators. This was only natural, "as no land tax was imposed on these lands." The *Sadr tirni-guzàr* got assistance from the local authorities. He was personally responsible for his share in the lease to the Kárdár. The grazing rates first fixed for Jhang were—

	Rs.	A.	P.		Rs.	A.	P.
Camels, male	1	8	0	Bár Buffaloes ...	0	10	0
„ Female ..	1	0	0	Village buffaloes	0	5	0

Goats and sheep, Rs 3 2 0 per hundred.

Cows and young animals were exempted. Only cattle actually grazing in the Bár were taxed. The collections were much lower than they had been in previous years.

Changes in the *tirni* administration introduced by Colonel Hamilton.

There seems to have been but little change in the *tirni* administration during the first ten years of our rule. In 1860 Colonel Hamilton introduced a system that practically remained

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Changes in the *tirni* administration introduced by Colonel Hamilton.

in force until 1874-75. In his Circular, No. 126 of 14th June, 1860, he briefly noted the causes that rendered a change of system unavoidable Under the Sikh rule as all waste lands were considered to be the property of Government, the tax was a capitation tax on cattle. The Regular Settlement of 1855-57 defined and demarcated village boundaries, and included in them vast tracts of waste land that had previously been *de facto* Government property. These lands now belong in full property to the villages, and *tirni* "now "can be taken only from cattle grazing in lands beyond the village "boundaries." Colonel Hamilton suggested that small *rakhs* situated between villages should be leased to neighbouring zamíndárs. An enumeration of cattle in the whole Division was to take place on a certain day. The rates fixed by Colonel Hamilton were—

	Rs.	A.	P.		Rs.	A.	P.
Camels, male .	1	0	0	Milch buffaloes ..	0	10	0
,, female	1	8	0	Cows	0	4	0

Goats and sheep, 6 pies.

The following animals were free:

A.—Male camels to the 3rd year.
B.—Female do.
C.—Cows and buffaloes do.
D.—Bulls, bullocks, male buffaloes, horses, mares, ponies, mules, and asses.

Only cattle grazing in the Bár were to be taxed, but if one head of cattle of a village or herd was found grazing within the Bár, the whole cattle of the same description in the village or herd became liable to be taxed. All cattle liable to be taxed found in the Bár, or proved to have grazed there without having been entered in the lists and registers, could be charged double, triple, or quadruple rates. Villages were thus assessed yearly, nominally on the basis of a supposed enumeration of their cattle, but really in a haphazard kind of way. The villages in the cultivated portions of the district and the herdsmen and flock-masters of the Bár were arranged in circles, and each circle was placed in charge of a *Sadr tirni-guzàr*. The *Sadr tirni-guzàr* collected from the villages and herds in his circle. The whole of the Government waste lands were undivided, and, the tax paid, the tax-payer might graze his cattle anywhere in the district. The rules entitled him to graze free throughout the Mooltan division. A village had nominally the option of electing to be *tirni-guzàr*, *i. e.*, liable to *tirni* or not. If the cattle of a village, alleging itself to be non-*tirni-guzàr*, were caught grazing in the Bár, not only were the punitive rates above mentioned levied, but the whole cattle of the village were summarily recorded as *tirni-guzàr*, and were thenceforth charged annually with *tirni*. The system was one of direct management, and a large staff of Dároghás, Náib-Dároghás, camel *sawàrs* and other myrmidons was maintained. Major Hamilton's rules were sanctioned. Mr. Cust, in a memorandum on the subject, noted: "In fact it is but justice to the agriculturist that "a certain amount of taxation should fall on the pastoral tribes "who make use of the vast Government forest ranges to which "they have no title either of property or occupation."

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Signs of change in 1869.

Introduction of the *chak* system.

In 1869 His Honour the Lieutenant-Governor authorised the Financial Commissioner to lease out the grazing, instead of levying the tax by enumeration, in any district in which he was satisfied as to the expediency of the change.

The change was made in 1874-75, and after much discussion and some half measures the introduction of the *chak* or block system was finally determined upon. It is still in force except in the portion of the district lying in the Sind Ságar Doáb. Its main features are these. The Government waste lands of the Bars, the Thal, and the scattered *rakhs* in the Vichanh have been arranged and divided into *chaks*. The portion of the Jhang tahsíl that lies in the Vichanh, between the Jhelam and Chenáb, is one *chak*, and the portion of the Chiniot tahsíl lying on the right bank of the Chenáb, another. The remainder of the district lying along the left bank has been cut up into several *chaks*. The *chak* in each case consists of the particular block of Bár and the villages lying between it and the river which, if *tirni-guzàr*, are attached to the block. The *chak* is let out annually to a varying number of contractors called *chakdàrs*, for a fixed sum. The villages of the *chak* are divided into *tirni-guzàr*, and the *ghair tirni-guzàr*, *tirni* paying and non-*tirni* paying. The oretically to be *tirni* paying or not is optional to the villages, but practically it is not. A *tirni-guzàr* village is one in which the whole of the village cattle pay *tirni* every year, whether they graze in the Bár or not. It is taken for granted that the whole of the cattle graze in the Bár every year. The *ghair tirni-guzàr* villages are those who are not attached to any *chak*. It is assumed that the cattle of these villages never do graze, and they are therefore exempted from payment of *tirni*. If they are caught grazing, they become liable to penal rates. The *chakdàrs* collect from the *tirni*-paying villages at the rates sanctioned. These *chakdàrs* are the old *Sadr tirni-guzàrs* of the Sikh system under another name, and are generally from year to year the same persons, the most influential zamíndárs residing in the neighbourhood of the *chak*. The sums for which the various *chaks* were leased during the first few years after the introduction of the system were based on an estimate thus calculated. The cattle of the *tirni-guzàr* villages were enumerated and the income calculated. To this was added the estimated income from the cattle of outsiders grazing in the *chak* during the year. The total formed the sum, more or less modified to suit particular circumstances, for which the *chak* was let. These estimates were revised annually until a few years past. They were indicative only, not in any way binding. The *chakdàrs* are entitled to collect the authorised fees from the living cattle only, existing in the village. The collections may be above or below the estimate in the case of any given village, but the *chakdàr* has no right to collect anything in excess of the fixed fees. The income from cattle not attached to the *chak* is made up of charges on cattle belonging to villages attached to other *chaks*, cattle belonging to other districts, and the cattle belonging to nomad tribes dwelling if possible all the year round in the Bár. The scale of fees was revised in 1875 by Mr. Tolbort, and fixed as below :—

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Introduction of the *chak* system.

		Rs.	A.	P.		Rs.	A.	P.
Camels ...	Male	0	12	0	Cows	0	6	0
	Female	1	2	0	Sheep and goats...	0	0	9
Buffaloes...	Male	0	6	0	Oxen	0	3	0
	Female	0	12	0	Horses	0	6	0

Donkeys and mules ... ... Rs. 0 3 0

To allow for the very inferior character of the pasturage, the rates for the Vichanh *chak* were half these. Bullocks, male buffaloes, horses, donkeys and mules of *tirni-guzàr* villages *grazing in their own chak*, are exempt. Sheep and goats, not six months old on 1st April, and other cattle not eighteen months old, are exempt for the ensuing financial year.

The *tirni* collections for the last 20 years are given below:—

		Rs.	A.	P.		Rs.	A.	P.
Camels ...	Male ...	0	12	0	Cows	0	6	0
	Female ...	1	2	0	Sheep and goats ...	0	0	9
Buffaloes...	Male ...	0	6	0	Oxen	0	3	0
	Female ...	0	12	0	Horses	0	6	0

Donkeys and mules ... ... Rs. 0 3 0

Year.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.	Rs.
Tirni ..	71,761	71,761	69,605	61,595	64,375	63,791	78,570	72,268	73,894	75,232
Sajji ..	3,835	5,546	6,070	5,550	6,750	14,710	7,073	9,200	15,887	16,747
Munj ..	38	38	50	53	102	55	300	290	300	300

Year.	1870.	1871.	1872.	1873.	1874	1875.	1876.	1877.	1878.	1879.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs	Rs.	Rs.
Tirni ..	87,628	1,27,343	1,15,636	1,09,958	1,10,887	1,01,193	92,792	79,208	80,017	80,193
Sajji .	12,586	16,630	11,950	13,350	Inclu	ded in	*tirni*	from 18	74-75	
Munj ..	290	1,489	968	1,187	550	330	Inclu	ded in 1876-77.	*tirni*	from

At first, grazing fees, *tirni*, *sajji* sales, and *murj kàna* sales were shown separately

Redemarcation of Garh Máhárája and Ahmadpur *rakhs*.

Shortly after the commencement of the Settlement of 1880 the *rakh* demarcation in the *ilàkas* of Garh Máhárája and Ahmadpur was revised. These two *parganàs* until 1861 were included in the Muzaffargarh district. The *rakhs* were originally demarcated in a summary manner without a full khowledge of the facts and without due regard to the interests of the people, by pencil lines drawn on the maps of the Revenue Survey. In not a few instances, wells and cultivated lands were included in the *rakh* area, and villages were cut off from their grazing grounds by intervening appropriated *jangal*. The revision of the *rakh* boundaries was conducted on the same lines in this district as in Muzaffargarh. The result was that the Government waste land situate in the two *parganàs* was cut down to 32,876 acres from 54,857 acres. The *rakhs* in the two *parganàs* are, excluding that of Sadkána Mirali, now thirteen in number.

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The introduction of the Dera Ismáil Khán *tirni* system into the western portion of the district.

The release of so much waste to the zamíndárs, accompanied by the partition of the Dera Ismáil Khán Thal between the zamíndárs and the Government, and its division into villages held in sole proprietary right by individuals and *rakhs* the sole property of Government, rendered a change in the *tirni* arrangements obtaining in this portion of the district imperative. The Dera Ismáil Khán or Sháhpur system of *tirni* has accordingly been introduced. The old system of levying *tirni* has been abolished. Instead, an assessment has been imposed on the waste lands of each village in their grazing capacity. The Government waste lands of the Thal are now leased annually to lessees who collect grazing fees at a fixed scale from the cattle that graze therein and those only. For the two Thal *chaks* no separate camel *tirni* has been imposed. No grazing fee is levied from the cattle of zamíndárs grazing in the Ahmadpur and Garh Máhárája *rakhs*, but a separate camel *tirni* is levied from the camels resident and grazing in the *ilàka*. The right of free grazing in these 13 *rakhs* has been absolutely surrendered to the zamíndárs on account of the extreme proverty of the *rakhs* as grazing grounds, and to prevent the possibility of these *rakhs* ever being leased to any outsiders. The assessments on the village waste in the villages trans-Jhelam and Jhelam-Chenáb amount to Rs. 2,337, being Rs. 615 below the assessment given by the sanctioned rate of Re. 1-12-0 per 100 acres.

The *sajji* assessment.

The *sajji* assessment statistics are given below:—

	Settlement of 1856.		Settlement of 1880.	
	Villages.	Jamas.	Villages.	Jamas.
		Rs		Rs.
Jhang	9	99	7	170
Shorkot	17	564	10	655
District	26	663	17	825

The amount in Jhang is trifling. The assessments in Shorkot are much higher; in *mauza* Bhangú the demand on account of *sajji* is Rs. 300. The *sajji* crop depends upon a year of favourable rain-fall; especially rain is needed after the plants have been pruned. The *sajji* is manufactured by professional *sajji*-makers, to whom this business is entrusted by the lessee. They get half the produce as their wages. Some other payments are made to the watchman, and to the blacksmith who assists in the process.

Leased wells in the Government waste. The system used for their assessment.

The assessment on the leased *darkhwàsti*, wells and plots situate in the Government wastes of the Thal and Bárs, amounts to Rs. 6,310, more or less, on 299 wells or plots. These wells have been sunk at various times since the Regular Settlement, by persons originally Crown tenants under leases from Government. At the Settlement of 1880, following the orders passed in reference to similar Crown tenants in the Montgomery district, all lessees holding on leases granted previously to the issue of the Financial Commissioner's Book Circular VII of 10th March 1868, were recorded as full proprietors of their wells and the lands attached.

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Land and Land Revenue.

Leased wells in the Government waste. The system used for their assessment.

These wells are not found scattered here and there everywhere throughout the Bár and Thal tracts. They are generally located along the edge of the Bár near the village boundaries, and the lessees are usually residents of the nearest village. Those farther away in the interior of the Bár have been constructed more with the object of watering cattle than raising crops. Besides the well lands there are a few plots of *bàràni* cultivation held on leases. The assessment of these wells and plots has been framed on principles different from those on which lands held in private proprietorship have been assessed. In the case of the latter the area under cultivation and the estimated area annually cultivated by a well have been the two bases of the calculation. In assessing these leased wells, the area of the grant without reference to the area under cultivation has been the point most considered. The lands are grants from Government. When the lease is given the land is waste, and the revenue demand is naturally proportioned to the extent of the grant. Taking two grants equal in area and quality of soil, the original assessments will be equal. If at the expiry of the original leases it is found that the lands of one lease are lying waste and the well out of work, while the other well is prospering and has a large cultivated area attached, this is no reason for diminishing the tax in the one case and raising it in the other. To do so is to put a premium on laziness and to tax energy.

The assessment statistics for each tahsíl are given below :—

	Wells.	Total area.	Culturable.	Cháhi.	Báráni.	Fallow.	Total Málguzári area.
Chiniot ...	88	5,419	2,882	1,474	284	548	5,188
Jhang ...	156	7,245	4,262	2,204	12	554	7,032
Shorkot ...	46	2,169	1,577	388	3	128	2,096
District ...	290	14,833	8,721	4,066	299	1,230	14,316

The revenue rates adopted are these :—

Tahsíl.	Tract.	Minimum per acre.	Average per well.	Maximum per well.
		Annas.	Rs.	Rs.
Chiniot	Sándal and Kirána Bárs ...	8	25	30
Jhang	Sándal Bár ...	6	17	20
	Vichanh Bár ...	8	25	30
Shorkot	Sándal Bár ...	6	17	20
	Thal ...	5	16	20

The resultant *jamàs* are subjoined :—

	Minimum.	Average.	Maximum.	Old	New.
	Rs.	Rs.	Rs.	Rs.	Rs.
Chiniot	2,200	2,593	2,640	1,454	2,450
Jhang	2,810	2,768	3,320	2,016	2,903
Shorkot	773	752	920	603	800
District	5,783	6,113	6,880	4,073	6,153

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In addition to the *jamàs* thus framed, the lessees of all wells have been charged one anna in the rupee as *màlikàna*. From this payment the proprietors of wells leased before 1868 are exempt. Cesses are charged as on ordinary land revenue.

Kasht Bàràni.

Year by year a certain amount of revenue is realised from the lease of lands in the Bár for rain cultivation. The assessment rates charged are :—tobacco, Rs. 1-8-0 ; *til*, cotton, wheat, *tàra mìra*, barley, gram, Rs. 1-4-0 ; *bàjra*, *mung-màsh*, *chìna*, *moth*, *jowàr*, *kharbùzà*, turnips, Rs. 1. Collections from 1860 to 1879 are given below :—

Year.	1860	1861	1862	1863	1864	1865	1866	1867	1868	1869
Collections ..	401	109	2,024	4,043	647	522	698	2,419	1,154	3,160
Year	1870	1871	1872	1873	1874	1875	1876	1877	1878	1879
Collections	2,626	1,361	6,888	4,188	3,870	3,181	2,579	1,762	8,761	4,906

Applications are made specifying the amount of land and the crop or crops that it is intended to cultivate. The Tahsíldár gives permission, and this is subsequently ratified by the Deputy Commissioner. Later on, the area under crop, or that has been sown, is measured up, and the rent is collected in accordance with the above rates from the lessee. The chief crops grown are *bàjra*, *jowàr*, *til*, *moth*, *mung-màsh*, gram, and wheat. *Kharìf* crops predominate. In favourable years splendid *bàjra* and *moth* or *mung* crops are grown. *Bàjra* crops in the Kirána Bár are better than elsewhere. This Bár is supposed to be generally more favourable for the production of rain crops than the Sándal Bár. There is no doubt that the rain cultivation in the Bár has materially interfered with the prosperity of the Utár villages on both sides of the river. The tenant of an Utár well is generally more of a herdsman than an agriculturist, and there is nothing he likes better than some ten acres of *bàràni* cultivation surrounded with good pasturage and a pool of water near. With his family and cattle he leaves the well, constructs a rough shed, and lives under it in the Bár, or as often as not has no cover except a *pìlù* bush. The seed once sown, he has nothing to do but to trust in Providence : there is no watering or weeding to be done ; and there is little that the fatalist zamíndár loves better. Camels, horses, and even human beings are yoked to the plough when the early rains are peculiarly favourable ; such is the anxiety to get as much seed into the ground as possible where there is a certainty of its germination.

CHAPTER VI.

TOWNS.

Chapter VI.

Towns.

General statistics of towns.

At the Census of 1881, all places possessing more than 5,000 inhabitants, all municipalities, and all head-quarters of district and military posts were classed as towns. Under this rule the following places were returned as the towns of the Jhang district :—

Tahsil.	Town.	Persons.	Males.	Females.
Jhang	Maghiána	12,574	6,569	6,005
	Jhang	9,055	4,964	4,091
Chiniot	Chiniot	10,731	5,297	5,434
Shorkot	Shorkot	2,283	1,190	1,093
	Ahmadpur	2,338	1,223	1,115

The distribution by religion of the population of these towns, and the number of houses in each are shown in Table No XLIII, while further particulars will be found in the Census Report in Table No XIX and its appendix and Table No. XX The remainder of this chapter consists of a detailed description of each town, with a brief notice of its history, the increase and decrease of its population, its commerce, manufactures, municipal government, institutions, and public buildings ; and statistics of births and deaths, trade and manufactures, wherever figures are available.

Jhang and Maghiána. Description.

The towns of Jhang and Maghiána are two miles apart, are situated in latitude 31° 16′ 16″ and longitude 72° 21′ 45″ and contain a population of 21,629 souls. They are connected by two well-metalled roads, which start from the east and west ends of Maghiána, cross one another in the middle where the Upper School is situated at an equal distance from either town, and enter Jhang on the west and east, respectively.

The two towns form a single municipality. The Chenáb flows past them at a distance of about three miles to the west, but in the hot weather the Kharora branch fills and runs close past the towns, and with its avenue three miles long, and its handsome masonry bathing *ghâts*, adds a peculiar beauty to the neighbourhood. The country round is well wooded ; fine gardens abound ; there are good driving roads, well shaded with trees, and passing through rich cultivation ; and altogether the towns and their environs form a beautiful oasis in the howling waste around. An inundation canal leaves the Kharora branch near Jhang, passes round Maghiána, and after a course of five miles empties itself into the same branch.

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Jhang town.

The capital of the Siál State, with many fine and picturesque masonry buildings, Jhang was the principal of the two towns. But some years ago the civil head-quarters were shifted from a position half way between the two towns to the immediate neighbourhood of Maghiána, which has now outgrown its rival in population. The town is traversed by a single main street, running east and west, which is lined on either side with masonry shops built on a uniform plan. The streets and lanes are well paved with brick, and are well drained. The pinnacle of the Náth Sáhib-ka-Mandar is a conspicuous object for miles round. The town is surrounded by a mud wall, which is in ruins. The road, which leaves Jhang on the east, is for 500 yards on its way to Maghiána lined by walls, built by Mr. Wakefield to protect it from the shifting sand through which it passes. Outside the walls of the town are the school buildings with a pretty fountain, the dispensary, and the police buildings. The wells, supplied by the Chenáb with water filtered through the intervening sand, give water of excellent quality.

Maghiána town.

Once a small village, Maghiána is now a town of some importance. It is built on no regular plan, but is traversed by several broad steets, lined with shops built of masonry, on a uniform pattern. The streets and lanes are well paved with brick, and are drained into a water channel on the west of the town, which empties itself into the Kharora branch of the Chenáb. The western side of the town is protected from flood by a high embankment, nearly a mile long. It stopped free circulation of air, and had only a narrow lane behind it. The embankment has been now cut down to the level of the lane, a height quite sufficient for protection from flood, and the whole has been paved and now forms a handsome boulevard, 50 feet broad. In the centre of the town, there is a handsome *chauk* with a fountain, shaded by a beautiful group of trees, which is used as a vegetable and fruit market.

There are no buildings of any importance in the town. Outside, to the north-east, is a fine masonry tank, in which is an island with a Hindu shrine, shaded by beautiful trees. The municipal garden, well planted with grafted mangoes and other fruit trees, lies round it, and on one side stands the municipal hall and station library. Outside the eastern gate are the Civil hospital and the Middle school, with a handsome fountain. Further to the east are the Tahsíl and Thána, the houses of the Civil officers, the Sessions house, Kutcherry and Treasury, the Fort, a Refuge built after the Mutiny, the Jail, and Police lines. The drinking water, drawn from wells, which get their supply well filtered by the intervening sand from the Chenáb, is excellent. The canal, mentioned above, runs through the public garden, which is thoroughly stocked with fruit trees, vegetables and flowers.

History.

The old town of Jhang, the remains of which can still be seen to the west of the present town and close to the shrine of Núr Sháh, is said to have been founded in 1462 by Mal Khán, the ninth in descent from Siál, the ancestor of the Siáls; and was washed away by the river. The word *jhang* signifies a wood, *jhangi* being in common local use for a clump of trees. The

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History.

present town was founded during the reign of Aurangzeb in 1688, by a *sanyàsi fakír*, Lál Náth, the twelfth in descent from whom, Shamsher Náth, now dwells in the Nath-ka-Mandar, the finest building in the town. The town was besieged and taken by Ranjít Singh in 1805. The present head of the Siáls, Nawáb Muhammad Ismáil Khán, lives in the town.

The town of Maghiána was nothing but a pretty village 20 years ago, and has no history. It was founded by Megha, ancestor of the Maghiána clan of Siáls, who emigrated thither from Lohábhír.

Taxation and trade.

The municipality, which includes both the towns of Jhang and Maghiána, was first established in 1862. It is of the 2nd Class with the Deputy Commissioner as President, District Superintendent of Police, Civil Surgeon and Assistant Commissioner or Extra Assistant Commissioner as *ex-officio* members. There are 12 non-official members, who are nominated by Government on the suggestion of the Deputy Commissioner. Table No. XIV shows the income of the municipality for the last five years. It is chiefly derived from octroi levied on the value of goods brought within municipal limits; a coarse kind of cloth (*khaddar*) made in the district is bought up by middle-men to the yearly value of 8 or 10 lakhs and sold to the *powindahs*, and the octroi on this, really an export duty, contributes largely to the municipal income. *Ghi*, wool, *khar* (impure carbonate of soda and potash), and tamarisk galls are largely exported. So is maddar, bought from the *powindahs*. Soap also of a superior kind is manufactured and exported; leather-work, including saddlery, and jars for *ghi* and oil, are in much demand. Brass work, especially imitation Chubb-locks, have quite a Punjab reputation.

The site of Maghiána is very favourable, being on the edge of the high-lands, out of reach of the river floods, and upon the great lines of traffic. Here the route of the Kandahár caravans from Dera Ismáil Khán to Fírozpur and Dehli, crosses the military road from Mooltan to Wazírábád. Roads have also been constructed connecting Maghiána with Sháhpur in one direction, and Pák Pattan, *viâ* Kamália, in another. Jhang is situated in the low-land. It has no transit, and but little indigenous trade; and now that the Government offices and establishments have been removed to Maghiána, it has ceased to be a place of any importance.

Institutions and public buildings.

The principal institutions of Jhang and Maghiána are the two Middle schools, one near each town, the Upper school at Adhiwál, half way between the two towns, the charitable dispensary with its branch at Jhang, and the municipal hall, with its reading-room, library, and small museum. There is a *sarài* and dák-bungalow, a small Church with a pretty garden, and the usual Court-houses, Tahsíl and Thána. There are many *dharmsáls*, *thakurdwàras*, *shiwálas* and *masjids* in both towns, where travellers put up in large numbers. There are nine *katras* in Maghiána and one in Jhang, where merchants stay and store their goods.

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Jhang Town.—Population and vital statistics.

The population as ascertained at the enumerations of 1868, 1875 and 1881 is shown below :—

Year of census.	Persons.	Males.	Females.
1868 ..	9,124	5,213	3,911
1875 ..	8,609	..	..
1881 ..	9,055	4,964	4,091

The details in the margin give the population of suburbs. It would appear from information supplied by the Deputy Commissioner, that no fewer than 71 small scattered hamlets have been excluded from, and three hamlets and the civil lines included within, municipal limits since 1875. The constitution of the population by religion, and the number of occupied houses, are shown in Table No. XLIII. Details of sex will be found in Table No. XX of the Census Report of 1881.

Town or suburb.	Population.	
	1868.	1881.
Jhang town ..	9,124	6,966
Suburbs ..		1,196
Civil lines ..		893

Maghiána town.—Population and vital statistics.

The population as acertained at the enumerations of 1868, 1875 and 1881 is shown below :—

Limits of enumeration.	Year of census.	Persons.	Males.	Females.
Whole town ..	1868	11,389	6,156	5,231
	1881	12,574	6,569	6,005
Municipal limits ..	1868	10,854	..	..
	1875	18,618	..	..
	1881	12,574	..	..

It is difficult to ascertain the precise limits within which the enumerations of 1868 and 1875 were taken ; but the details in the margin, which give the population of suburbs, throw some light on the matter. The figures for the population within municipal limits, according to the published tables of the Census of 1868, are taken from the Census of 1875 ; but it was noted at the time that their accuracy was in many cases doubtful. The constitution of the population by religion, and the number of occupied houses, are shown in Table No. XLIII. Details of sex will be found in Table No. XX of the Census Report of 1881. The annual birth and death-rates per mille of population since 1868 are given at the top of the next page, the basis of calculation being in every case the figures of the most recent census. The actual number of births and deaths registered during the last five years is shown in Table No. XLIV.

Town or suburb.	Population.	
	1868.	1881.
Maghiána town ...	10,525	11,462
Hasnána	864	704
Minor suburbs ...	Included in the town.	408

Chiniot town.

The town of Chiniot is situated in latitude 31° 43′ 32″ and longitude 73° 0′ 59,″ and contains a population of 10,731 inhabitants. It stands under and on the slope of low rocky hills about two miles

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Maghiána Town.—Population and vital statistics.

Year.	Birth-Rates.			Death-Rates.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
1868	...	...	..	13	18	12
1869	...	...	...	30	29	30
1870	25	26	24	16	16	17
1871	20	19	21	18	18	18
1872	21	12	9	15	15	16
1873	23	11	12	21	23	19
1874	36	21	15	20	22	19
1875	45	24	20	30	32	28
1876	28	16	12	26	25	28
1877	30	15	14	24	24	23
1878	30	15	15	37	36	40
1879	26	14	11	27	27	28
1880	38	20	17	21	17	26
1881	36	18	17	22	20	24
Average	30	17	14	24	23	24

Chiniot Town.

from the left bank of the Chenáb, and in hot weather the heat thrown out by them is almost intolerable. The town is divided into three parts, and is picturesquely grouped on and below the hills. One part lies close under the hill, another towards the tahsíl, and the third to the west. This last, though included in the town, is always spoken of as the Thattah, and is more a separate collection of houses, round the tomb of Pír Shekh Ismáil, than an integral part of the town. Most of the houses are of excellent brick-work; and the solid well-built aspect of the town is striking. The most conspicuous building is the Sháhi Masjid built by Nawáb Sádúlla Khán Tahím, physician and minister of Sháh Jahán. There is also a *khángáh* sacred to the memory of Sháh Burhán, a saint revered alike by Hindús and Musalmáns. It has a good market-place attached to it. There are some good streets which are well paved, and many of the houses are lofty and commodious, especially those belonging to the Khoja traders, who have large business dealings with Amritsar, Calcutta, Bombay and Karáchí. The natural drainage is good, but the municipality is poor, and sanitary arrangements are not as good as they ought to be. The drinking-water, derived from wells getting their supply from the Chenáb, is exceedingly good. The country is well wooded, and the hills to the westward, with Koh Kirána in the distance, and the Chenáb flowing through a rocky defile in the foreground, give great beauty to the place. There is a beautiful garden, well stocked with fruit trees, near the tahsíl and rest-house.

Chiniot is doubtless a town of considerable antiquity; but little is known about its origin and history. It is said to have been founded by a king's daughter, Chandan, sister of a chief called Máchhí Khán, who was accustomed to hunt in man's attire. While on one of her expeditions, she was so charmed with the site—hill, river and plain—that she ordered a town to be built on the spot. From her name the town was first called Chandniot. In old deeds the name is always spelled thus. The town suffered severely from

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Chiniot Town.

the Dúráni inroads, and from constant sieges during the last half of the 18th century, that witnessed the struggles between the Siáls, Bhangi Sirdárs and the Sukarchakia Misl, headed by Máhan Singh and his son the Máhárája; and again in 1848 from the occupation of Naráyan Singh; but is now rapidly recovering. The most prosperous days of Chiniot were during the reign of Sháh Jahan, when Nawáb Sádúlla Khán Tahím was the governor. It was he who built the Sháhi Masjid, an exceedingly handsome edifice of hewn stone obtained from the hills near Chiniot. The pillars that support the western portion of the mosque underneath the domes are singularly chaste and elegant in design. Some repairs and restorations have been recently made that, to say the least, are in very doubtful taste, and are certainly utterly out of harmony with the character of the building. Another vestige of the Tahíms' magnificence is to be found in the remains of an elephant house. Now, the Tahíms are represented by a Deputy Inspector of Police, a couple of patwáris, and one or two other families resident at Chiniot. The decay of families that years ago were rulers in the land is in this district most remarkable. A large colony of Khojas resides here. The townspeople have an unenviable character for forgery, litigiousness, false evidence, and anonymous petitioning. Any old deed that comes out of Chiniot should be looked upon with the greatest suspicion.

The municipality was constituted in 1862, and is one of the 3rd class. The Deputy Commissioner is President, the Tahsíldár is Vice-President, and there are eight nominated members. Table No. XLV shows the income of the municipality for the last five years. It is derived from octroi, levied at rates varying from Re. 1-9 to Rs. 3-2 per cent. on the value of almost all goods brought within municipal limits. Chiniot is celebrated for its wood-carving and masonry. Masons from Chiniot are said to have been employed in building the Táj Mahal. The architect of the Golden Temple at Amritsar was a Chiniot mason, and the head mason now attached to the building is another. Of late years the Khojas have begun to export large quantities of bones, horns and hides to Calcutta. Other articles of export are *ghi*, coarse cloth, cotton and wool. There is a small transit trade in the hands of *powindah* merchants, and a little traffic with the salt-mines.

There is a good charitable dispensary, a school-house, and a large number of *dharmsáls* and *masjids*, where travellers put up. A large *sarái* has lately been dismantled, as it was found that no one used it. There is a good rest-house standing in a pretty garden.

The population as ascertained at the enumerations of 1868, 1875 and 1881, is shown below :—

Year of census	Persons	Males	Females
1868	11,477	6,106	5,371
1875	11 999		
1881	10,731	5,297	5,434

The constitution of the population by religion, and the number of occupied houses, are shown in Table No. XLIII. Details of sex

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Chiniot Town.

will be found in Table No. XX of the Census Report of 1881. The annual birth and death-rates per mille of population since 1868 are given below, the basis of calculation being in every case the figures of the most recent census :—

Year.	Birth-rates.			Death-rates.		
	Persons.	Males.	Females.	Persons.	Males.	Females.
1868	...	...	...	16	14	18
1869	...	...	...	27	23	31
1870	27	22	23	23	23	24
1871	32	23	41	22	19	25
1872	29	12	17	26	23	28
1873	30	14	17	22	20	25
1874	43	20	23	25	20	30
1875	48	22	26	32	26	39
1876	39	21	19	32	29	36
1877	39	19	20	26	23	28
1878	38	19	19	29	27	32
1879	32	16	16	27	25	30
1880	34	16	18	25	23	27
1881	37	19	18	24	21	26
Average	36	18	19	26	23	29

The actual number of births and deaths, registered during the last five years, is shown in Table No. XLIV.

Shorkot Town

Though a town of historical renown (see Chapter II), and still the head-quarters of the tahsíl, Shorkot is now little more than a village. It contains 2,283 inhabitants, and stands about four miles from the left bank of the Chenáb, underneath the lofty mound or Bhír on which the ancient town was built. It is surrounded by fine groves of date palms, the fruit of which is excellent and of various kinds. Many of the buildings are lofty, but most of them are in a state of ruin; a fine *bàzàr* with a gate at each end, and lined with shops built on a uniform plan, exists; but few of the shops are tenanted. There is a good dispensary, a school-house and garden, a rest-house with a good garden, and the tahsíl and police buildings. A large hollow to the east of the town, and from which the materials of the Bhír were evidently taken, becomes a fine lake in the rains, but adds much to the unhealthiness of the town.

The Municipal Committee consists of four nominated members, the Deputy Commissioner and Tahsíldár; but is recommended for reduction. Its income is shown in Table No. XLV. The trade of the town is insignificant.

The identification of Shorkot with one of the towns of the Malli, and with the town of Po-lo-fa-to, visited by Hwen Thsang, has been already alluded to. The present town stands below a huge mound of ruins about 100 feet in height, and almost rectangular in shape, surrounded with a wall of large-sized bricks, and measures about 2,000 feet by 1,000 in size. Burnes, who visited the place, describes it as "a mound of earth, surrounded by a brick wall, and so high as to be seen for a circuit of six or eight miles." The same traveller was informed by the people that

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their town had been destroyed by some king from the westward, about 1,300 years ago. General Cunningham received the same tradition about its destruction, which he attributes to the 'White Huns,' whose date he fixes in the sixth century of our era. The foundation of the city is attributed to a fabulous Rája Shor, of whom nothing is known but the name. From the evidence of coins found upon the spot, General Cunningham infers that the town was occupied certainly as early as the Greek kings of Ariána and the Punjab, who followed at no long interval after Alexander; and that it flourished under the Indo-Scythian dynasties, down to A.D. 250, or perhaps later. But, as the Hindu coins are confined to the Bráhmin Kings of Kábul and the Punjab, he concludes that for some centuries the town was either deserted or much decayed, and that it was either re-occupied or restored in the tenth century by one of these Bráhmin kings.

Mr. Steedman writes:—

"To an observer possessing no special antiquarian knowledge, the mound appears to have been the citadel of the old town. The abruptness with which the mound rises from the ground, and the existence of remains of what appear to have been bastion towers at intervals round the mound, support this view. The old town must have sloped away from the fort northwards."

The name of the town is attributed to various sources; to a fabulous Rája Shor, to the saline character of the ground, to the quarrelsome character of the inhabitants, and to a fierce soldier of Islam, named Táj-ul-dín Shori. Taj-ul-din came to the Panjáb in the van of the Muhammadan invasion as a follower of Pír Ghází, who fell a martyr on the field of battle in combat with the infidels who then held Shorkot. The town was taken and derived its present name from Táj-úl-dín's surname. Pír Ghází's tomb is still to be seen close by Shorkot in a wood of aged *farásh* and *jal* trees.

The population, as ascertained at the enumerations of 1868, 1875 and 1881, is shown below:—

Years of census.	Persons.	Males.	Females.
1868	3,156	1,756	1,400
1875	2,478	...	...
1881	2,283	1,190	1,093

The constitution of the population by religion, and the number of occupied houses, are shown in Table No. XLIII. Details of sex will be found in Table No. XX of the Census Report of 1881.

Ahmadpur Town.

Ahmadpur is a small town in the Shorkot tahsíl, situated about a mile from the right bank of the Chenáb, and is 55 miles from Jhang. It was founded about 200 years ago by Nusrat Siál, who named it after his grandson Ahmad. The town lies low, and is surrounded in the rainy season by large sheets of water, and the health of the inhabitants suffers in consequence. The houses are irregular, and built chiefly of sun-dried bricks. There is one *bázár*, which has lately been paved with brick. It has a population of 2,338

Chapter VI.

Towns.

Ahmadpur Town.

inhabitants, most of them agriculturists; but some of the Hindús are very wealthy, and trade with Bombay, Calcutta and Karáchi, especially in wheat. There is a good dispensary and a good school.

The Municipal Committee consists of six nominated members, the Tahsíldár and the Deputy Commissioner. Its income is shown in Table No. XLV. It has been recommended for reduction.

The population, as ascertained at the enumerations of 1868, 1875 and 1881, is shown below :—

Years of census.	Persons.	Males.	Females.
1868	3,436	1,827	1,609
1875	2,146	...	...
1881	2,338	1,223	1,115

The constitution of the population by religion, and the number of occupied houses, are shown in Table No. XLIII. Details of sex will be found in Table No. XX of the Census Report of 1881.

STATISTICAL TABLES

APPENDED TO THE

GAZETTEER

OF THE

JHANG DISTRICT.

(INDEX ON REVERSE).

"ARYA PRESS," LAHORE.

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Table No. II, showing DEVELOPMENT.

1	2	3	4	5	6	7
DETAILS.	1853-54.	1858-59.	1863-64.	1868-69.	1873-74.	1878-79.
Population ..	..	..	..	347,043	..	395,296
Cultivated acres ..	..	..	..	241,325	264,366	411,549
Irrigated acres ..	..	..	..	174,743	190,078	204,081
Ditto (from Government works) ..	..	..	..	..	..	..
Assessed Land Revenue, rupees ..	..	..	..	2,84,237	2,94,590	2,97,010
Revenue from land, rupees ..	..	..	..	2,72,522	4,10,339	2,79,117
Gross revenue, rupees ..	..	..	..	4,07,885	4,80,158	4,93,888
Number of kine ..	..	..	..	140,317	258,337	124,250
,, sheep and goats ..	..	..	..	292,214	259,833	221,560
,, camels ..	..	..	..	17,353	19,918	9,390
Miles of metalled roads ..	..	..	..	648	9	..
,, unmetalled roads ..	..	..	..		954	954
,, Railways ..	..	..	..	..	..	..
Police staff ..	..	..	405	475	504	508
Prisoners convicted ..	537	662	491	1,595	1,091	860
Civil suits,—number ..	2,663	1,091	2,415	3,430	4,131	5,066
,, —value in rupees ..	78,128	56,745	1,16,712	1,24,209	1,84,229	1,80,490
Municipalities,—number ..	..	..	..	..	2	4
,, —income in rupees ..	..	..	..	18,947	27,764	31,840
Dispensaries,—number of ..	..	..	..	1	4	6
,, —patients ..	..	..	..	4,336	29,477	61,672
Schools,—number of ..	..	..	37	36	42	41
,, —scholars ..	..	..	1,097	1,513	2,439	2,232

NOTE.—These figures are taken from Tables Nos. I, III, VIII, XI, XV, XXI, XLI, XLV, L, LIX, and LXI of the Administration Report.

Table No. III, showing RAINFALL.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	ANNUAL RAINFALL IN TENTHS OF AN INCH.																	
Rain-gauge station.	1866-67.	1867-68.	1868-69.	1869-70.	1870-71.	1871-72.	1872-73.	1873-74.	1874-75.	1875-76.	1876-77.	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	Average.
Jhang ..	72	161	145	107	54	58	106	170	75	94	76	160	124	42	44	94	146	10[illegible]
Chiniot ..	27	197	126	112	99	153	161	248	97	117	159	141	91	[illegible]	[illegible]	14[illegible]	[illegible]	10[illegible]
Shorkot ..	23	70	72	183	43	46	97	146	91	56	68	136	196	55	59	138	18[illegible]	[illegible]

NOTE.—These figures are taken from the weekly rainfall statements published in the *Punjab Gazette*.

Table No. IIIA, showing RAINFALL at head-quarters.

1	2	3	1	2	3
	ANNUAL AVERAGES.			ANNUAL AVERAGES.	
MONTHS.	No. of rainy days in each month—1867 to 1876.	Rainfall in tenths of an inch in each month—1867 to 1881.	MONTHS.	No. of rainy days in each month—1867 to 1876.	Rainfall in tenths of an inch in each month—1867 to 1881.
January ..	1	3	September ..	1	7
February ..	1	5	October ..	..	..
March ..	3	12	November ..	..	1
April ..	2	5	December ..	1	3
May ..	1	5	1st October to 1st January ..	1	4
June ..	1	7	1st January to 1st April ..	5	19
July ..	4	32	1st April to 1st October ..	11	78
August ..	3	20	Whole year ..	17	100

NOTE.—These figures are taken from Table No. XXIV of the Revenue Report, and from page 34 of the Famine Report.

Table No. IIIB, showing RAINFALL at Tahsil Stations.

1	2	3	4	5
	AVERAGE FALL IN TENTHS OF AN INCH, FROM 1873-74 TO 1877-78.			
TAHSIL STATIONS.	1st October to 1st January.	1st January to 1st April.	1st April to 1st October.	Whole year.
Chiniot ..	7	24	121	152
Shorkot ..	5	10	75	90

NOTE.—These figures are taken from pages 36, 37 of the Famine Report.

Table No. V, showing the DISTRIBUTION of POPULATION.

1	2	3	4	5
	District.	Tahsil. Jhang	Tahsil. Chiniot.	Tahsil. Shorkot.
Total square miles	6,007*	2,365	2,272	1,220
Cultivated square miles	643	268	194	186
Culturable square miles	3,939	1,569	1,493	877
Square miles under crops (average 1877 to 1881) ..	474	204	132	138
Total population	395,296	171,713	128,241	95,342
Urban population	36,981	21,629	10,731	4,621
Rural population	358,315	150,084	117,510	90,721
Total population per square mile	69	73	60	79
Rural population per square mile	63	64	55	75
Towns & villages. Over 10,000 souls	2	1	1	..
5,000 to 10,000	1	1	..	..
3,000 to 5,000	3	..	..	3
2,000 to 3,000	12	5	3	4
1,000 to 2,000	52	23	10	19
500 to 1,000	141	52	50	39
Under 500	550	251	190	109
Total	761	333	254	174
Occupied houses .. Towns	4,595	2,710	1,088	797
Occupied houses .. Villages	62,429	30,613	15,416	16,400
Unoccupied houses .. Towns	2,974	1,523	888	563
Unoccupied houses .. Villages	17,810	8,894	3,575	5,341
Resident families .. Towns	8,943	5,269	2,482	1,192
Resident families .. Villages	76,121	33,229	23,469	19,423

NOTE.—These figures are taken from Tables Nos. I and XVIII of the Census of 1881, except the cultivated, culturable and crop areas, which are taken from Tables Nos. I and XLIV of the Administration Report.

* Including 150 square miles of river bed.

Table No. VI, showing MIGRATION.

1	2	3	4	5	6	7	8
			Males per 1,000 of both sexes.		Distribution of Immigrants by Tahsils.		
Districts.	Immigrants.	Emigrants.	Immigrants.	Emigrants.	Jhang.	Chiniot.	Shorkot.
Lahore	416	1,500	589	635	144	191	81
Gujranwala	3,817	2,616	502	547	316	3,311	190
Shahpur	5,549	6,906	468	540	2,335	2,977	237
Mooltan	1,478	10,944	536	614	235	44	1,199
Montgomery	3,336	4,410	592	594	2,173	987	176
Muzaffargarh	465	3,309	509	602	69	9	387
Dera Ismail Khan	1,244	2,526	589	688	575	29	640

NOTE.—These figures are taken from Table No. XI of the Census Report of 1881.

Table No. VII, showing RELIGION and SEX.

1	2	3	4	5	6	7	8
	District.			Tahsils.			
	Persons.	Males.	Females.	Jhang.	Chiniot.	Shorkot.	Villages.
Persons	395,296	..	..	171,713	128,241	95,342	358,315
Males	..	214,382	..	92,792	68,863	52,727	195,139
Females	..	..	180,914	78,921	59,378	42,615	163,176
Hindus	64,892	34,696	30,196	32,168	15,369	17,355	48,630
Sikhs	3,477	1,994	1,483	2,417	693	367	2,828
Jains	4	2	2	..	4	..	4
Buddhists	..	..	..	..	..	..	..
Zoroastrians	2	1	1	2	..	..	1
Musalmans	326,910	177,680	149,230	137,121	112,173	77,616	306,846
Christians	11	9	2	5	2	4	6
Others and unspecified	..	..	..	..	..	..	..
European & Eurasian Christians ..	11	9	2	5	2	4	..
Sunnis	315,002	171,323	143,679	132,602	110,761	71,639	295,351
Shiahs	11,835	6,323	5,512	4,519	1,410	5,906	11,422
Wahabis ..	8	5	3	..	2	6	8

NOTE.—These figures are taken from Tables Nos. III, IIIA, IIIB of the Census of 1881.

Table No. VIII, showing LANGUAGES.

1	2	3	4	5
		Distribution by Tahsils.		
Language.	District.	Jhang.	Chiniot.	Shorkot.
Hindustani	319	245	34	40
Bagri	42	40	2	..
Panjabi	394,537	171,171	128,187	95,179
Jatki	86	37	..	49
Pashtu	259	191	7	61
Pahari	8	8	..	..
Kashmiri	12	5	1	6
Sindhi	11	..	9	2
Persian	9	8	..	1
English	10	6	1	3

NOTE.—These figures are taken from Table No. IX of the Census Report for 1881.

Table No. IX, showing MAJOR CASTES and TRIBES.

1	2	3	4	5	6	7	8	9	10
Serial No. in Census Table No. VIIIA.	Caste or tribe.	Total Numbers.			Males, by religion.				Proportion per mille of population.
		Persons.	Males.	Females.	Hindu.	Sikh.	Jain.	Musalman	
	Total population ..	395,296	214,382	180,914	34,696	1,094	2	177,680	1,000
18	Biloch ..	15,093	7,967	7,126	..	..	..	7,967	38
1	Jat ..	48,242	26,799	21,443	132	112	..	26,555	122
2	Rajput ..	89,641	49,493	40,148	61	46	..	49,386	227
58	Khokhar ..	11,239	6,154	5,085	..	..	..	6,154	28
7	Arain ..	6,077	3,272	2,805	..	..	..	3,272	15
17	Shekh ..	5,337	2,858	2,479	..	..	..	2,858	14
37	Mughal ..	3,122	1,746	1,376	..	..	..	1,746	8
3	Brahman ..	5,319	2,892	2,427	2,887	4	..	1	13
24	Saiyad ..	5,944	3,071	2,873	..	..	..	3,071	15
21	Nal ..	6,307	3,439	2,868	2	3	..	3,434	16
25	Mirasi ..	7,741	4,107	3,634	..	..	..	4,107	20
16	Khatri ..	15,196	8,318	6,878	7,752	199	..	367	38
10	Arora ..	45,041	23,736	21,305	22,135	1,431	..	170	114
44	Khojah ..	3,352	1,677	1,675	..	..	..	1,677	9
4	Chuhra ..	20,944	11,184	9,760	166	4	..	11,014	53
19	Mochi ..	14,132	7,736	6,396	..	..	..	7,736	36
9	Julaha ..	24,176	13,042	11,134	..	..	..	13,042	61
28	Machhi ..	9,517	5,125	4,392	..	..	..	5,125	24
42	Mallah ..	3,066	1,556	1,510	..	..	..	1,556	8
22	Lohar ..	3,062	1,627	1,435	..	18	..	1,609	8
11	Tarkhan ..	8,418	4,515	3,903	1	2	..	4,512	21
13	Kumhar ..	15,381	8,212	7,169	1	..	..	8,211	39
59	Charhoa ..	5,234	2,801	2,433	..	..	..	2,801	13
38	Qassab ..	4,979	2,624	2,355	..	..	..	2,624	13

NOTE.—These figures are taken from Table No. VIIIA of the Census of 1881.

Table No. IXA, showing MINOR CASTES and TRIBES.

1	2	3	4	5
Serial No. in Census Table No. VIIIA.	Caste or tribe.	Persons.	Males.	Females
6	Pathan	1,710	1,030	680
12	Awan	1,496	816	680
30	Sunar	1,697	902	795
35	Faqir, miscellaneous & unspecified	1,618	919	699
40	Jogi	573	294	279
48	Bharal	1,505	829	676
70	Ulama	706	379	327

NOTE.—These figures are taken from Table No. VIIIA of the Census of 1881.

Table No. X, showing CIVIL CONDITION.

1	2	3	4	5	6	7	8
	DETAILS.	SINGLE.		MARRIED.		WIDOWED.	
		Males.	Females.	Males.	Females.	Males.	Females.
Actual figures for religions.	All religions	129,981	81,377	74,722	77,856	9,679	21,681
	Hindus	20,463	12,012	12,453	13,470	1,780	4,714
	Sikhs	1,144	625	744	672	106	186
	Jains	1	1	1	1	..	..
	Buddhists	..	..	..	..	..	..
	Musalmans	108,368	68,738	61,519	63,711	7,793	16,781
	Christians	5	1	4	1	..	..
Distribution of every 10,000 souls of each age.	All ages	6,064	4,498	3,485	4,303	451	1,199
	0—10	9,992	9,956	8	43	..	1
	10—15	9,746	8,574	251	1,418	3	8
	15—20	8,408	3,176	1,559	6,780	33	94
	20—25 .. .	6,185	714	3,736	9,027	79	259
	25—30	4,098	216	5,711	9,347	191	437
	30—40	2,251	102	7,404	8,839	345	1,059
	40—50	1,879	63	7,854	7,339	767	2,598
	50—60	1,149	68	7,519	5,404	1,332	4,528
	Over 60	1,124	89	6,246	2,688	2,630	7,228

NOTE.—These figures are taken from Table No. VI of the Census Report.

Table No. XI, showing BIRTHS and DEATHS.

1	2	3	4	5	6	7	8	9	10
	TOTAL BIRTHS REGISTERED.			TOTAL DEATHS REGISTERED.			TOTAL DEATHS FROM		
YEARS.	Males.	Females.	Persons.	Males.	Females.	Persons.	Cholera.	Small-pox.	Fever.
1877 ..	..	..	..	2,526	1,917	4,443	..	102	2,826
1878 ..	..	..	..	2,398	1,902	4,300	..	367	2,400
1879 ..	..	..	..	2,628	1,839	4,467	242	654	2,053
1880 ..	6,066	4,929	10,995	3,744	2,762	6,506	..	104	3,580
1881 ..	6,658	5,712	12,370	3,470	3,000	6,470	..	60	3,796

NOTE.—These figures are taken from Tables Nos. I, II, VII, VIII, and IX of the Sanitary Report.

Table No. XI A, showing MONTHLY DEATHS from ALL CAUSES.

1	2	3	4	5	6	7
MONTH.	1877.	1878.	1879.	1880.	1881.	Total.
January ..	460	453	606	406	624	2,549
February ..	427	319	629	610	595	2,580
March ..	428	292	613	594	544	2,471
April ..	373	235	359	448	434	1,849
May ..	314	322	325	565	564	2,090
June ..	388	330	275	586	454	2,033
July ..	314	305	357	541	481	1,998
August ..	264	239	330	557	404	1,794
September ..	283	326	207	492	468	1,776
October ..	340	316	183	480	574	[illegible]
November ..	435	465	260	543	[illegible]	[illegible]
December ..	417	708	323	684	667	2,799
Total ..	4,443	4,300	4,467	6,506	6,470	26,[illegible]

NOTE.—These figures are taken from Table No. III of the Sanitary Report.

Table No. XI B, showing MONTHLY DEATHS from FEVER.

1	2	3	4	5	6	7
MONTH.	1877.	1878.	1879.	1880.	1881.	Total.
January ..	323	263	338	237	368	1,529
February ..	304	197	254	266	371	1,492
March ..	259	159	250	320	342	1,330
April ..	216	131	163	233	262	1,005
May ..	200	161	159	308	352	1,180
June ..	262	189	190	312	258	1,151
July ..	200	144	104	256	249	953
August ..	161	112	112	290	195	870
September ..	159	168	104	275	256	962
October ..	203	196	85	272	336	1,092
November ..	282	283	153	324	406	1,448
December ..	257	397	201	396	401	1,652
TOTAL ..	2,826	2,400	2,053	3,589	3,796	14,664

NOTE.—These figures are taken from Table No. IX of the Sanitary Report.

Table No. XII, showing INFIRMITIES.

1	2	3	4	5	6	7	8	9
	INSANE.		BLIND.		DEAF AND DUMB.		LEPERS.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
All religions .. Total ..	332	154	1,252	1,305	336	191	37	14
All religions .. Villages ..	281	139	1,087	1,120	305	170	34	12
Hindus ..	46	15	191	189	51	24	7	2
Sikhs ..	2	..	5	1	3	..	1	..
Musalmans ..	284	139	1,056	1,115	282	167	29	12

NOTE.—These figures are taken from Tables Nos. XIV to XVII of the Census of 1881.

Table No. XIII, showing EDUCATION.

1	2	3	4	5	1	2	3	4	5
	MALES.		FEMALES.			MALES.		FEMALES.	
	Under instruction.	Can read and write.	Under instruction.	Can read and write.		Under instruction.	Can read and write.	Under instruction.	Can read and write.
All religions .. Total ..	3,651	14,386	127	118	Musalmans ..	1,375	2,832	92	77
All religions .. Villages ..	2,236	10,579	68	84	Christians ..	..	8	..	1
Hindus ..	2,167	11,616	32	35	Tahsil Jhang ..	2,060	7,300	78	53
Sikhs ..	109	429	3	4	,, Chiniot ..	750	3,173	17	34
Jains ..	..	..	..	..	,, Shorkot ..	841	3,913	32	31
Buddhists ..	..	..	..	..					

NOTE.—These figures are taken from Table No. XIII of the Census of 1881.

Table No. XIV, showing detail of SURVEYED and ASSESSED AREA.

1	2	3	4	5	6	7	8	9	10	11	12
	CULTIVATED.				UNCULTIVATED.						
	Irrigated.										
	By Government works.	By private individuals.	Unirrigated.	Total cultivated.	Grazing lands.	Culturable.	Unculturable.	Total uncultivated.	Total area assessed.	Gross assessment.	Unappropriated culturable waste, the property of Govt.
1868-69 ..	..	174,743	66,582	241,325	1,504,481	985,601	919,460	3,409,542	3,650,867	284,237	2,308,480
1873-74 ..	..	190,078	74,288	264,366	1,505,672	961,490	918,023	3,385,185	3,649,551	294,590	2.308,480
1878-79 ..	..	204,081	207,468	411,549	1,520,383	1,001,035	716,580	3,237,998	3,649,547	297,010	2,308,480
Tahsil details for 1878-79—											
Tahsil Jhang ..	..	89,038	78,796	167,834	682,700	322,186	382,446	1,387,332	1,555,166	127,823	1,026,515
,, Chiniot ..	..	64,706	59,261	123,970	590,310	365,469	221,364	1,177,143	1,301,113	74,515	924,230
,, Shorkot ..	..	50,339	69,411	119,745	247,373	313,380	112,770	673,523	793,268	94,672	357,735

NOTE.—These figures are taken from Table No. VIII of the Administration Report, except the last column, which is taken from Table No. I of the same Report.

Table No. XV, showing TENURES held direct from Government as they stood in 1878-79.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
	Whole District.				Tahsil Jhang.				Tahsil Chiniot.				Tahsil Shorkot.			
NATURE OF TENURE.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres	No. of estates.	No. of villages.	No. of holders or shareholders.	Gross area in acres.
A.—Estates not being village communities, and paying in common (Zamindari).																
IV.—Paying 1,000 rupees revenue and under. — Held by individuals under the law of primogeniture	13	13	19	15,135	8	8	8	8,988	3	3	9	1,708	2	2	2	4,439
Proprietary cultivating village communities.																
B.—*Zamindari* .. Paying the revenue and holding the land in common ..	39	39	279	30,292	12	12	49	11,949	19	19	80	12,419	8	8	150	5,924
C.—*Pattidari* .. The land and revenue being divided upon ancestral or customary shares, subject to succession by the law of inheritance.	10	10	502	23,101	..	..	..	..	10	10	502	23,101	..	..	..	..
D.—*Bhayachara* .. In which possession is the measure of right in all lands	194	194	11,010	406,559	60	60	2,412	125,904	89	89	3,228	110,704	45	45	5,370	169,951
E.—*Mixed or imperfect pattidari or bhayachara.* — In which the lands are held partly in severalty and partly in common, the measure of right in common land being the amount of the share or the extent of land held in severalty.	533	533	16,102	808,805	255	255	4,315	238,739	130	130	4,639	329,940	148	148	7,148	240,126
F.—*Grantees of Government not falling under any previous class, and paying revenue direct to Government in the position of—*																
I.—*Proprietors*, including individuals rewarded for service or otherwise, but not purchasers of Government waste.	2	2	265	3,880	2	2	265	3,880	..	..	..	..	..	..	..	..
II.—Lessees ..	512	512	942	253,251	348	348	570	191,315	56	56	356	21,101	108	108	16	40,835
I.—Government waste, reserved or unassigned ..	11	..	..	2,104,583	..	..	..	823,079	..	..	..	896,844	11	..	..	384,660
Total	1,314	1,303	29,119	3,645,606	685	685	7,619	1,403,854	307	307	8,814	1,395,817	322	311	12,686	845,935

Note.—These figures are taken from Table No. XXXIII of the Revenue Report for 1878-79.

Table No. XVI, showing TENURES not held direct from Government as they stood in 1878-79.

1	2	3	4	5	6	7	8	9
	District Jhang.		Tahsil Jhang.		Tahsil Chiniot.		Tahsil Shorkot.	
NATURE OF TENURE.	No. of holdings.	Acres of land held.	No. of holdings.	Acres of land held.	No. of holdings.	Acres of land held.	No. of holdings.	Acres of land held.
A.—TENANTS WITH RIGHT OF OCCUPANCY.								
II. Paying rent in kind. (a) Paying a stated share of the produce in kind. (1) Paying ½ produce and more ..	261	32,105	88	11,017	107	11,014	66	10,074
(2) ⅓ produce and less than ½ produce ..	182	13,508	62	4,612	60	4,402	60	4,494
(3) ¼ " " ⅓ " ..	514	3,809	210	1,283	133	1,216	171	1,310
(c) Paying a fixed quantity of grain for their holdings, with or without a further cash contribution.	19	155	11	81	8	74	..	..
Total paying rent in kind ..	976	49,577	371	16,993	308	16,706	297	15,878
Grand Total of Tenants with rights of occupancy ..	976	49,577	371	16,993	308	16,706	297	15,878
C.—TENANTS-AT-WILL.								
I. Paying in cash	235	1,538	108	509	127	1,029	..	..
II. Paying in kind. (a) ½ produce and more	25,500	520,310	12,260	236,691	5,985	131,234	7,255	152,385
(b) less than ½ produce	1,600	92,205	812	37,462	698	48,331	90	6,412
Grand Total of Tenures ..	28,311	663,630	13,551	291,655	7,118	197,300	7,642	174,675

Note.—These figures are taken from Table No. XXXIV of the Revenue Report.

Table No. XVII, showing GOVERNMENT LANDS.

1	2	3	4	5	6	7	8	9
			Acres held under cultivating leases.		*Remaining acres.*			
	No. of estates.	Total acres.	Cultivated.	Uncultivated.	Under Forest Department.	Under other Departments.	Under Deputy Commissioner.	Average yearly income, 1877-78 to 1881-82.
Whole District ..	33	2,327,734	9,157	14,784	87,450	..	2,216,343	84,233
Tahsil Jhang ..	13	1,020,526	2,171	5,999	..	..	1,012,356	..
" Chiniot ..	19	917,713	6,608	3,160	87,450	..	820,495	..
" Shorkot ..	1	389,495	378	5,625	..	..	383,492	..

NOTE.—These figures are taken from Table No. IX of the Revenue Report of 1881-82.

Table No. XIX, showing LAND ACQUIRED by GOVERNMENT.

Purpose for which acquired.	Acres acquired.	Compensation paid, in rupees.	Reduction of revenue, in rupees.
Roads ..	399	4,117	121
Canals ..	..	..	..
State Railways ..	..	..	..
Guaranteed Railways ..	..	..	..
Miscellaneous ..	464	5,216	153
Total ..	863	9,333	274

NOTE.—These figures are taken from Table No. XI of the Revenue Report.

Table No. XX, showing ACRES UNDER CROPS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
YEARS.	Total.	Rice.	Wheat.	Jawar.	Bajra.	Makai.	Jau.	Gram.	Moth.	Poppy.	Tobacco.	Cotton.	Indigo.	Sugarcane.	Vegetables.
1873-74 ..	261,386	553	153,982	27,678	2,735	2,100	7,383	4,393	379	45	974	16,978	4	169	23,708
1874-75 ..	282,051	682	149,852	29,102	3,203	1,901	8,000	4,203	2,809	36	1,133	16,529	5	2,919	36,052
1875-76 ..	272,613	701	145,780	25,203	2,905	1,705	7,590	5,102	3,102	27	1,028	15,045	4	230	35,759
1876-77 ..	282,438	127	161,169	25,450	626	2,317	6,083	12,026	619	27	1,173	16,881	2	260	23,203
1877-78 ..	277,284	105	159,502	12,304	300	1,907	5,950	15,005	700	23	1,200	17,677	6	289	24,312
1878-79 ..	261,410	101	146,077	19,143	2,361	2,315	4,911	8,541	307	12	310	24,710	8	289	20,353
1879-80 ..	327,811	150	175,703	38,295	1,826	2,259	6,242	14,188	407	18	996	28,292	8	209	17,995
1880-81 ..	327,445	141	175,687	39,463	1,847	2,264	6,148	13,717	440	14	1,001	28,488	11	223	18,510
1881-82 ..	322,788	176	172,760	38,561	2,148	2,721	6,240	13,208	1,520	14	938	29,781	..	240	17,322
NAME OF TAHSIL.	TAHSIL AVERAGES FOR THE FIVE YEARS, FROM 1877-78 TO 1881-82.														
Jhang ..	130,671	94	70,109	16,171	122	17	1,044	4,164	370	6	415	13,172	2	87	3,576
Chiniot ..	84,664	41	48,717	6,823	1,426	2,276	2,432	2,348	288	7	314	7,315	..	156	9,280
Shorkot ..	88,014	..	47,119	6,560	148	..	1,522	6,420	17	3	160	5,303	5	7	6,844
TOTAL ..	303,350	135	165,946	29,553	1,696	2,293	5,898	12,932	675	16	889	25,790	7	250	19,700

NOTE.—These figures are taken from Table No. XLIV of the Administration Report.

Table No. XXI, showing RENT RATES and AVERAGE YIELD.

1			2			3
Nature of crop.			Rent per acre of land suited for the various crops, as it stood in 1881-82.			Average produce per acre as estimated in 1881-82.
			Rs.	A.	P.	lbs.
Rice		Maximum	11	8	0	265
		Minimum	7	8	0	
Indigo		Maximum	..	..	..	..
		Minimum	..	..	..	
Cotton		Maximum	18	5	4	229
		Minimum	14	5	4	
Sugar		Maximum	45	0	0	..
		Minimum	30	10	8	
Opium		Maximum	39	0	0	9
		Minimum	25	0	0	
Tobacco		Maximum	18	5	4	449
		Minimum	13	0	0	
Wheat	Irrigated	Maximum	14	0	0	735
		Minimum	11	5	4	
	Unirrigated	Maximum	10	10	8	
		Minimum	7	5	4	
Inferior grains	Irrigated	Maximum	6	5	4	470
		Minimum	3	0	0	
	Unirrigated	Maximum	5	10	8	
		Minimum	4	0	0	
Oil seeds	Irrigated	Maximum	9	0	0	332
		Minimum	7	8	0	
	Unirrigated	Maximum	6	10	8	
		Minimum	4	5	4	
Fibres	Irrigated	Maximum	..	..	..	..
		Minimum	..	..	..	
	Unirrigated	Maximum	..	..	..	
		Minimum	..	..	..	
Gram		..	..	..	..	472
Barley		..	..	..	..	594
Bajra		..	..	..	..	..
Jawar		..	..	..	..	357
Vegetables		..	..	..	..	..
Tea		..	..	..	..	..

NOTE.—These figures are taken from Table No. XLVI of the Administration Report.

Table No. XXII, showing NUMBER of STOCK.

1	2	3	4	5	6	7
	WHOLE DISTRICT FOR THE YEARS.			TAHSILS FOR THE YEAR 1878-79.		
KIND OF STOCK.	1868-69.	1873-74.	1878-79.	Jhang.	Chiniot.	Shorkot.
Cows and bullocks	140,317	258,337	124,250	53,250	35,540	35,460
Horses	2,001	1,623	1,752	750	500	502
Ponies	487	517	236	100	75	61
Donkeys	24	4,680	3,297	1,442	942	913
Sheep and goats	292,214	250,833	221,560	94,953	63,320	63,287
Pigs	..	..	..	..	..	..
Camels	17,353	19,918	9,399	4,152	2,795	2,452
Carts	6	2	2	..	2	..
Ploughs .	37,565	35,894	41,731	17,883	11,922	11,926
Boats		61	59	24	17	18

NOTE.—These figures are taken from Table No. XLV of the Administration Report.

Table No. XXIII, showing OCCUPATIONS of MALES.

1	2	3	4	5	1	2	3	4	5
Number.	Nature of occupations.	Males above 15 years of age.			Number.	Nature of occupations.	Males above 15 years of age.		
		Towns.	Villages.	Total.			Towns.	Villages.	Total.
1	Total population ..	11,460	112,060	123,520	17	Agricultural labourers ..	17	1,138	1,155
2	Occupation specified ..	10,502	106,924	117,426	18	Pastoral ..	75	7,429	7,504
3	Agricultural, whether simple or combined.	1,593	57,250	58,843	19	Cooks and other servants ..	236	881	1,117
					20	Water-carriers ..	70	384	454
4	Civil Administration ..	626	1,193	1,819	21	Sweepers and scavengers ..	24	496	520
5	Army ..	3	31	34	22	Workers in reed, cane, leaves, straw, &c.	177	2,339	2,516
6	Religion ..	341	1,021	1,362					
7	Barbers ..	126	1,402	1,528	23	Workers in leather ..	46	19	65
8	Other professions ..	64	367	431	24	Boot-makers ..	85	3,393	3,478
9	Money-lenders, general traders, pedlars, &c.	498	1,534	2,032	25	Workers in wool and pashm	4	3	7
					26	,, ,, silk ..	62	42	104
10	Dealers in grain and flour ..	816	4,370	5,186	27	,, ,, cotton ..	1,523	9,508	11,031
11	Corn-grinders, parchers, &c.	24	32	56	28	,, ,, wood ..	229	1,878	2,107
12	Confectioners, green-grocers, &c.	300	118	418	29	Potters ..	185	2,468	2,653
					30	Workers and dealers in gold and silver.	171	678	849
13	Carriers and boatmen ..	398	2,281	2,679					
14	Landowners ..	520	15,281	15,801	31	Workers in iron ..	74	704	778
15	Tenants ..	936	33,051	33,987	32	General labourers ..	644	3,819	4,463
16	Joint-cultivators ..	2	749	751	33	Beggars, faqirs, and the like	927	7,025	7,952

NOTE.—These figures are taken from Table No. XII A of the Census Report of 1881.

Table No. XXIV, showing MANUFACTURES.

1	2	3	4	5	6	7	8	9	10	11
	Silk.	Cotton.	Wool.	Other fabrics.	Paper	Wood.	Iron.	Brass and copper.	Buildings.	Dyeing and manufacturing of dyes.
Number of mills and large factories	..	..	..	..	..	..	..	..	..	..
Number of private looms or small works.	..	8,144	10	2	5	1,730	403	22	89	235
Number of workmen in large works. { Male ..	..	..	..	..	..	..	..	..	..	..
Number of workmen in large works. { Female ..	..	..	..	..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	..	9,606	14	2	64	2,033	825	56	122	520
Value of plant in large works ..	..	..	..	..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	..	19,19,200	1,079	659	5,182	5,11,687	1,65,000	20,700	48,000	1,42,100

	12	13	14	15	16	17	18	19
	Leather.	Pottery, common and glazed.	Oil-pressing and refining.	Pashmina and Shawls.	Carpets.	Gold, silver, and jewellery.	Other manufactures.	Total.
Number of mills and large factories	..	..	..	..	..	..	..	..
Number of private looms or small works.	1,952	1,501	58	..	1	470	1,496	16,178
Number of workmen in large works. { Male ..	..	..	..	..	..	..	..	..
Number of workmen in large works. { Female ..	..	..	..	..	..	..	..	..
Number of workmen in small works or independent artisans.	3,716	2,783	125	..	3	856	1,503	22,228
Value of plant in large works ..	..	..	..	..	..	..	..	..
Estimated annual out-turn of all works in rupees.	11,18,800	2,78,300	75,000	..	298	11,68,600	2,83,450	57,38,000

NOTE.—These figures are taken from the Report on Internal Trade and Manufactures for 1881-82.

Table No. XXV, showing RIVER TRAFFIC.

1	2	3	4	5	6
TRADE.			Average duration of Voyage in days.		
From	To	PRINCIPAL MERCHANDISE CARRIED.	Summer, or floods.	Winter or low water.	Distance in miles.
Aknur ..	Mithankot ..	Grain of all kinds, sugar, salt, spices, ghi, country cloth, silks, and wool ..	20	30	450
Wazirabad ..	Jhang ..	Wheat, gur, ghi, country cloth, wool, cotton, kupas, horns, haleia, balela, awla, sarun, timber	10	15	120
Ramnagar .	Do. ..	Ditto ditto ditto ..	8	12	100
Pindi Bhattian ..	Do. ..	Ditto ditto ditto ..	6	11	70
Wazirabad ..	Multan ..	Ditto ditto ditto ..	20	30	230
Ramnagar ..	Do. ..	Ditto ditto ditto ..	18	25	210
Pindi Bhattian ..	Do. ..	Ditto ditto ditto ..	14	20	180
Wazirabad ..	Mithankot ..	Ditto ditto ditto ..	25	40	350
Ramnagar ..	Do. ..	Ditto ditto ditto ..	22	36	330
Pindi Bhattian ..	Do. ..	Ditto ditto ditto ..	18	30	300
Multan ..	Wazirabad ..	Iron, cocoanuts, dates, black pepper, mung, sajji	30	45	230
Do. ..	Ramnagar ..	Ditto ditto ditto ..	24	40	210
Do. ..	Pindi Bhattian ..	Ditto ditto ditto ..	21	35	180
Mithankot ..	Wazirabad ..	Ditto ditto ditto ..	50	60	350
Do. ..	Ramnagar ..	Ditto ditto ditto ..	45	52	330
Do. ..	Pindi Bhattian ..	Ditto ditto ditto ..	40	45	300
Jhelam ..	Multan ..	Grain and oil-seeds	20	35	250
Do. ..	Sukkur ..	Ditto	45	60	500
Do. ..	Kotri ..	ditto	60	90	750

NOTE.—These figures are taken from pages 759, 760 of the Famine Report.

Table No. XXVI, showing RETAIL PRICES.

1	2		3		4		5		6		7		8		9		10		11		12		13		14		15		16	
	NUMBER OF SERS AND CHITANKS PER RUPEE.																													
YEAR.	Wheat.		Barley.		Gram.		Indian corn.		Jawar.		Bajra.		Rice (fine).		Urd dal.		Potatoes.		Cotton. (cleaned).		Sugar (refined).		Ghi (cow's).		Firewood.		Tobacco.		Salt (Lahori).	
	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.	S.	Ch.
1861-62 ..	19	2	25	11	23	5	..	..	20	1	21	..	5	19	12	1	..	..	2	14	2	13	2	..	340	9	4	11	12	2
1862-63 ..	26	2	40	2	32	3	..	..	30	5	30	5	5	13	19	6	.	..	2	3	2	8	2	..	317	4	4	3	10	2
1863-64 ..	25	13	42	..	31	12	..	..	32	10	33	2	5	13	20	12	..	..	1	7	2	7	2	2	298	9	4	7	9	11
1864-65 ..	19	9	29	3	25	3	..	.	23	5	23	13	6	5	17	1	..	.	2	..	2	13	2	1	261	4	3	14	9	9
1865-66 ..	17	12	25	7	24	12	.	.	21	..	21	..	5	9	16	1	..	.	2	3	2	13	1	9	210	14	4	3	9	9
1866 67	16	9	22	14	23	10	..	.	21	..	21	..	4	10	15	10	..	..	2	1	2	7	1	8	198	12	4	10	9	13
1867-68 ..	14	15	20	8	19	6	..		18	10	18	10	4	10	13	1	..	..	2	4	2	5	1	8	198	12	3	12	10	2
1868-69 ..	13	7	19	2	14	15	..	..	16	5	16	5	4	9	9	9	..	..	2	1	2	3	1	8	198	12	3	12	10	1
1869-70 .	11	9	15	15	11	10	..	..	14	15	12	9	4	5	10	6	..	..	1	13	2	5	1	6	198	12	4	10	9	15
1870-71 ..	14	..	19	11	15	6	.	..	17	4	12	9	4	7	13	6	..	..	2	1	2	5	1	6	198	12	4	3	9	14
1871-72 ..	17	8	25	8	19	..	23	..	25	..	22	..	5	4	16	..	12	..	2	4	2	12	1	8	213	..	5	..	10	10
1872-73 ..	23	..	31	..	23	..	30	..	31	..	25	..	5	..	26	..	12	..	2	6	2	6	1	9	213	..	4	..	10	8
1873-74 ..	18	..	28	..	24	..	27	..	24	..	27	..	6	8	16	..	11	8	2	9	2	13	1	15	240	..	4	8	10	8
1874-75 ..	23	8	36	..	34	8	30	..	30	..	32	..	6	..	18	..	16	..	2	12	3	..	1	15	240	..	6	..	10	12
1875-76 ..	20	8	27	..	28	..	28	..	28	..	28	..	7	..	16	..	10	..	2	4	3	..	1	11	240	..	6	..	10	8
1876-77 ..	27	..	29	..	33	..	36	..	85	..	32	..	6	..	20	..	8	..	2	10	3	2	1	10	213	4	6	..	10	12
1877-78 ..	16	8	24	..	22	8	22	..	22	..	16	.	6	..	14	..	10	.	2	8	2	14	1	11	200	..	6	..	10	12
1878-79	11	..	18	..	12	8	13	..	13	..	12	..	5	8	8	8	6	..	2	10	2	..	1	9	160	..	5	..	11	.
1879-80 .	11	12	17	..	14	8	13	..	13	..	14	..	5	..	11	..	8	.	2	8	2	4	1	7	200	..	4	..	11	12
1880-81 ..	12	12	19	..	17	..	20	..	16	..	16	..	5	.	12	8	8	.	2	3	2	4	1	7	180	..	4	..	12	..
1881-82 .	18	..	32	..	23	8	28	..	26	..	14	..	5	8	16	..	10	.	2	8	2	10	1	10	200	..	5	..	12	8

NOTE.—The figures for the first ten years are taken from a statement published by Government (Punjab Government No. 209 S. of 19th August 1872), and represent the average prices for the months of each year. The figures for the last ten years are taken from Table No. XLVII of the Administration Report, and represent prices as they stood on the 1st January of each year.

Table No. XXVII, showing PRICE of LABOUR.

1	2	3	4	5	6	7	8	9	10	11	12	13
YEAR.	Wages of Labour per day.				Carts per day.		Camels per day		Donkeys per score per day		Boats per day.	
	Skilled.		*Unskilled.*									
	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest	Highest	Lowest
	Rs. A. P.		Rs. A. P.	Rs. A. P.	Rs. A. P.		Rs. A. P.		Rs. A. P.		Rs. A. P.	
1868-69 ..	0 6 0		0 3 0	0 2 6	1 8 0		0 6 0		3 12 0		1 8 0	
1873-74 ..	0 8 0	0 6 0	0 4 0	0 2 6	1 12 0		0 8 0	0 6 0	3 12 0		5 0 0	
1878-79 ..	0 8 0	0 6 0	0 4 0	0 2 6	1 0 0	0 12 0	0 8 0	0 6 0	3 12 0	3 2 0	2 8 0	2 0 0
1879-80 ..	0 8 0	0 6 0	0 4 0	0 2 6	1 0 0	0 12 0	0 8 0	0 6 0	3 12 0	3 2 0	2 8 0	2 0 0
1880-81 ..	0 8 0	0 6 0	0 4 0	0 2 6	1 0 0	0 12 0	0 8 0	0 6 0	3 12 0	3 2 0	2 8 0	2 0 0
1881-82 ..	0 8 0	0 6 0	0 4 0	0 2 6	1 0 0	0 12 0	0 8 0	0 6 0	3 12 0	3 2 0	2 8 0	2 0 0

NOTE.—These figures are taken from Table No. XLVIII of the Administration Report.

Table No. XXVIII, showing REVENUE COLLECTED.

1	2	3	4	5	6	7	8	9
YEAR.	Fixed Land Revenue.	Fluctuating and Miscellaneous Land Revenue.	Tribute.	Local rates.	Excise.		Stamps.	Total Collections.
					Spirits.	Drugs.		
1868-69	2,72,522	92,608	..	..	1,843	1,991	36,378	4,05,342
1869-70	2,71,897	97,518	..	..	2,255	2,072	37,376	4,11,118
1870-71	2,69,876	1,09,258	..	..	3,182	2,423	32,200	4,17,020
1871-72	2,69,650	1,48,402	..	15,418	3,360	2,467	29,177	4,68,474
1872-73	2,76,286	1,39,117	..	18,428	2,781	2,430	37,364	4,76,406
1873-74	2,79,395	1,26,584	..	27,075	2,648	2,496	37,900	4,75,598
1874-75	2,82,382	1,19,519	..	25,541	3,210	2,602	38,871	4,72,215
1875-76	2,83,171	1,09,890	..	25,139	3,145	3,206	44,260	4,68,811
1876-77	2,85,662	98,020	..	24,311	3,227	3,865	44,304	4,59,389
1877-78	2,83,072	95,406	..	23,438	3,295	4,271	46,868	4,56,350
1878-79	2,79,117	1,01,088	..	31,315	2,664	3,000	47,944	4,65,128
1879-80	2,78,588	97,210	..	29,597	2,893	3,019	56,633	4,67,940
1880-81	2,66,527	1,63,622	..	34,495	3,284	2,726	55,056	5,25,710
1881-82	3,14,688	1,29,805	..	34,874	3,150	2,818	56,031	5,41,366

NOTE.—These figures are taken from Table No. XLIV of the Revenue Report. The following revenue is excluded:—"Canal, Forests, Customs and Salt, Assessed Taxes, Fees, Cesses."

Table No. XXIX, showing REVENUE DERIVED from LAND.

1	2	3	4	5	6	7	8	9	10	11	12	13
YEAR.	Fixed land revenue (demand).	Fluctuating and miscellaneous land revenue (collections).	Fluctuating Revenue.					Miscellaneous Revenue.				
			Revenue of alluvial lands.	Revenue of waste lands brought under assessment.	Water advantage revenue.	Fluctuating assessment of river lands.	Total fluctuating land revenue.	*Grazing dues.* By enumeration of cattle.	*Grazing dues.* By grazing leases.	Sale of wood from rakhs and forests.	Sajji.	Total miscellaneous land revenue.
District Figures.												
Total of 5 years—												
1868-69 to 1872-73 ..	13,74,937	5,86,903	26,552	19,276	..	..	46,495	3,48,984	77,28[illegible]	36,964	69,308	5,40,408
Total of 5 years—												
1873-74 to 1877-78 ..	14,43,718	5,49,057	31,928	18,560	..	..	51,152	96,437	3,41,014	35,794	7,919	4,97,905
1878-79 ..	2,87,817	1,00,916	2,946	8,629	..	..	11,640	..	69,501	7,124	54	89,306
1879-80 ..	2,86,358	96,605	1,996	5,187	..	..	9,934	..	69,502	6,264	54	86,671
1880-81 ..	2,81,695	1,62,392	1,882	6,296	..	2,342	87,028	..	68,472	5,762	44	75,369
1881-82 ..	3,14,775	1,24,383	2,959	7,571	..	3,407	48,515	..	66,682	6,069	34	75,868
Tahsil Totals for 5 years— 1877-78 to 1881-82.												
Tahsil Jhang ..	6,20,175	2,48,395	6,727	4,503	..	1,244	55,126	..	1,44,072	18,138	78	1,93,269
,, Chiniot ..	3,85,227	2,27,177	2,020	24,458	..	696	55,402	..	1,55,391	11,235	6	1,71,[illegible]75
,, Shorkot ..	4,56,257	1,04,870	5,607	600	..	3,809	53,164	..	44,945	2,909	156	51,[illegible]06

NOTE.—These figures are taken from Tables Nos. I and III of the Revenue Report.

Table No. XXX, showing ASSIGNED LAND REVENUE.

1	2	3	4	5	6	7	8	9	10	11
TAHSIL.	TOTAL AREA AND REVENUE ASSIGNED.								PERIOD OF ASSIGNMENT.	
	Whole Villages.		*Fractional parts of Villages.*		*Plots.*		*Total.*		*In perpetuity.*	
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue	Area.	Revenue.
Jhang ..	8,129	2,156	8,471	2,074	2,433	3,427	19,033	7,657	7,524	2,132
Chiniot .	..	..	376	384	2,311	3,192	2,687	3,576	931	694
Shorkot .	1,181	397	6,277	521	1,003	1,741	8,461	2,659	6,522	620
Total District	9,310	2,553	15,124	2,979	5,747	8,360	30,181	13,892	14,977	3,446

	12	13	14	15	16	17	18	19	20	21	22	23	24	25
	PERIOD OF ASSIGNMENT.—*Concluded.*								NUMBER OF ASSIGNEES.					
TAHSIL.	*For one life.*		*For more lives than one.*		*During maintenance of Establishment.*		*Pending orders of Government.*							
	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	Area.	Revenue.	In perpetuity.	For one life.	For more lives than one.	During maintenance.	Pending orders.	TOTAL.
Jhang ..	7,280	3,564	856	235	2,337	1,172	1,030	554	101	144	3	17	7	272
Chiniot ..	1,244	2,870	..	..	512	512	..	..	39	35	.	21	..	95
Shorkot .	511	1,467	..	..	247	185	1,181	397	28	53	..	22	1	104
Total District	9,035	7,391	856	235	3,096	1,869	2,217	951	168	232	3	60	8	471

NOTE.—These figures are taken from Table No. XII of the Revenue Report for 1881-82.

Table No. XXXI, showing BALANCES, REMISSIONS and TAKAVI.

YEAR.	*Balances of land revenue in rupees.*		Reductions of fixed demand on account of bad seasons, deterioration, &c., in rupees.	Takavi advances in rupees.
	Fixed revenue.	Fluctuating and miscellaneous revenue.		
1868-69 ..	1,704	..	177	4,230
1869-70	11,43	..	71	835
1870-71 ..	3,577	..	..	1,480
1871-72 . ..	3,526	.	75	6,950
1872-73 . .	4,756	..	249	9,005
1873-74 . .	5,402	..	625	3,775
1874-75 .. .	3,955	.	73	2,514
1875-76 .	6,811	236	93	944
1876-77	6,531	266	166	..
1877-78 .	8,008	150	181	.
1878-79 .	8,907	906	853	260
1879-80 ..	7,870	1,352	148	.
1880-81 .	15,389	6,159	330	..
1881-82 ..	3,580	4,734	21	200

NOTE.—These figures are taken from Tables Nos. I, II, III, and XVI of the Revenue Report.

Table No. XXXII, showing SALES and MORTGAGES of LAND.

1	2	3	4	5	6	7	8	9	10
YEAR.	SALES OF LAND.						MORTGAGES OF LAND.		
	Agriculturists.			*Non-Agriculturists.*			*Agriculturists.*		
	No. of cases.	Area of land in acres.	Purchase money.	No. of cases.	Area of land in acres.	Purchase money.	No. of cases.	Area of land in acres.	Mortgage money.
DISTRICT FIGURES.									
Total of 6 years—1868-69 to 1873-74 ..	716	13,157	1,59,873		..	..	842	24,583	1,70,263
Total of 4 years—1874-75 to 1877-78 ..	278	4,343	69,936	98	1,103	25,259	517	8,251	1,09,602
1878-79 ..	107	1,304	24,948	16	173	5,393	205	3,801	55,000
1879-80 ..	299	2,844	59,904	26	245	7,536	156	2,556	30,389
1880-81 ..	48	748	15,872	28	582	9,732	49	790	12,599
1881-82 ..	130	1,688	43,592	110	1,557	24,084	299	4,404	63,650
TAHSIL TOTALS FOR 5 YEARS—1877-78 TO 1881-82.									
Jhang ..	312	2,854	79,751	99	1,154	28,556	491	4,504	91,977
Chiniot ..	128	2,445	21,883	59	874	10,921	226	5,010	38,612
Shorkot ..	232	2,200	61,866	53	870	15,500	171	3,023	66,704

11	12	13	14	15	16	17	18	19
MORTGAGES OF LAND.—*Concluded.*			REDEMPTIONS OF MORTGAGED LAND.					
Non-Agriculturists.			*Agriculturists.*			*Non-Agriculturists.*		
No. of cases.	Area of land in acres.	Mortgage money.	No. of cases.	Area of land in acres.	Mortgage money.	No. of cases.	Area of land in acres.	Mortgage money.
DISTRICT FIGURES.								
Total of 6 years—1868-69 to 1873-74 ..	..	..	..	..	..	..	..	..
Total of 4 years—1874-75 to 1877-78 ..	232	4,066	63,163	98	1,199	12,152	105	1,726	8,082
1878-79 ..	87	756	10,824	20	262	2,593	11	62	1,280
1879-80 ..	242	8,014	58,349	14	394	2,215	21	168	2,975
1880-81 ..	23	186	5,878	15	396	1,504	..	..	..
1881-82 ..	120	1,449	27,195	106	1,520	17,362	..	..	..
TAHSIL TOTALS FOR 5 YEARS—1877-78 TO 1881-82.									
Jhang ..	..	..	..	74	1,286	13,452	..	..	..
Chiniot ..	..	..	..	20	346	2,277	..	..	..
Shorkot ..	468	6,446	115,690	73	1,039	9,422	46	313	5,639

NOTE.—These figures are taken from Tables Nos. XXXV and XXXV B of the Revenue Report. No details for transfers by agriculturists and others, and no figures for redemption, are available before 1874-75. The figures for earlier years include *all* sales and mortgages.

Table No. XXXIII, showing SALE of STAMPS and REGISTRATION of DEEDS.

1	2	3	4	5	6	7	8	9	10	11	12	13
YEAR.	INCOME FROM SALE OF STAMPS.				OPERATIONS OF THE REGISTRATION DEPARTMENT.							
	Receipts in rupees.		*Net income in rupees.*		*No. of deeds registered.*				*Value of property affected, in rupees.*			
	Judicial.	Non-judicial.	Judicial.	Non-judicial.	Touching immovable property.	Touching movable property.	Money obligations.	Total of all kinds.	Immovable property.	Movable property	Money obligations.	Total value of all kinds.
1877-78 ..	35,389	9,952	34,854	9,572	622	103	32	757	2,29,544	3,986	18,261	2,51,791
1878-79 ..	36,130	11,814	32,059	11,265	638	56	34	728	1,87,436	2,920	17,111	2,07,467
1879-80 ..	42,074	14,559	37,643	13,858	750	2	31	852	2,34,119	180	12,403	2,49,524
1880-81 ..	38,117	16,939	33,668	16,181	1,066	8	34	1,232	3,45,160	1,900	18,095	3,65,324
1881-82 ..	40,251	15,780	35,668	15,092	898	15	23	1,075	3,28,708	5,009	12,241	3,45,958

NOTE.—These figures are taken from Appendix A of the Stamp and Tables Nos. II and III of the Registration Report.

Table No. XXXIIIA, showing REGISTRATION.

1	2	3	4	5	6	7
	Number of Deeds registered.					
	1880-81.			1881-82.		
	Compulsory.	Optional.	Total.	Compulsory.	Optional.	Total.
Registrar Jhang	7	2	9	6	..	6
Sub-Registrar Jhang	558	167	725	439	152	591
" Chiniot	107	93	200	148	57	205
" Shorkot	215	83	298	207	66	273
Total of district ..	887	345	1,232	800	275	1,075

NOTE.—These figures are taken from Table No. I of the Registration Report.

Table No. XXXIV, showing LICENSE TAX COLLECTIONS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
YEAR.	NUMBER OF LICENSES GRANTED IN EACH CLASS AND GRADE.											Total number of licenses.	Total amount of fees.	Number of villages in which licenses granted.
	Class I.				*Class II.*				*Class III.*					
	1 Rs. 500	2 Rs. 200	3 Rs. 150	4 Rs. 100	1 Rs. 75	2 Rs. 50	3 Rs. 25	4 Rs. 10	1 Rs. 5	2 Rs. 2	3 Rs. 1			
1878-79 ..	..	..	..	9	4	22	118	412	1,050	3,041	8,558	13,214	20,260	..
1879-80 ..	..	..	..	8	7	27	116	415	1,067	2,922	7,948	12,510	28,852	..
1880-81 ..	..	..	..	9	14	37	201	962	..	..	..	1,223	18,445	293
1881-82 ..	..	..	..	9	14	39	220	1,045	..	..	..	1,327	19,850	293
Tahsil details for 1881-82—														
Jhang ..	..	..	..	6	6	13	81	528	..	..	..	634	9,005	104
Chiniot ..	..	..	..	2	2	10	54	289	..	..	..	357	5,090	118
Shorkot ..	..	..	..	1	6	16	85	228	..	..	..	336	5,755	71

Table No. XXXV, showing EXCISE STATISTICS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
YEAR.	FERMENTED LIQUORS.					INTOXICATING DRUGS.						EXCISE REVENUE FROM		
	Number of central distilleries.	*No. of retail shops.*		*Consumption in gallons.*		*No. of retail licenses.*		*Consumption in maunds.*				Fermented liquors.	Drugs.	Total.
		Country spirits.	European liquors.	Rum.	Country spirits.	Opium.	Other drugs.	Opium.	Charas.	Bhang.	Other drugs.			
1877-78 ..	2	22	4	39	955	32	32	7¼	½	22	35	2,104	4,268	6,372
1878-79 ..	2	20	3	36	766	32	32	8½	1¼	25	43	2,664	3,000	5,664
1879-80 ..	2	18	3	36	970	32	32	9	1	70	..	2,893	3,019	5,912
1880-81 ..	2	20	4	56	1,105	32	32	8½	½	40	..	3,280	2,726	6,006
1881-82 ..	2	24	6	50	955	32	32	7¾	½	44	..	3,150	2,818	5,968
TOTAL ..	10	104	20	217	4,751	160	160	41	4	201	78	14,091	15,831	29,922
Average ..	2	21	4	43	950	32	32	8	1	40	16	2,818	3,166	5,984

NOTE.—These figures are taken from Tables Nos. I, II, VIII. IX. X. of the Excise Report.

Table No. XXXVI, showing DISTRICT FUNDS.

1	2	3	4	5	6	7	8	9	10	11
	Annual income in rupees.			*Annual expenditure in rupees.*						
YEAR.	Provincial rates.	Miscellaneous.	Total income.	Establishment.	District post, and arboriculture.	Education.	Medical.	Miscellaneous.	Public Works.	Total expenditure.
1874-75 ..	..	..	31,558	1,400	4,129	6,781	1,839	1,766	9,971	25,886
1875-76 ..	..	..	27,091	1,625	4,668	6,388	2,370	1,070	10,106	26,226
1876-77 ..	..	..	28,773	1,393	4,975	6,071	3,072	600	12,059	28,770
1877-78 ..	..	..	28,676	2,000	3,652	6,136	2,722	600	7,687	22,797
1878-79 ..	..	..	28,434	2,100	3,120	6,959	2,722	1,411	6,522	22,834
1879-80 ..	33,561	615	34,176	2,100	3,074	7,152	3,108	1,480	5,622	22,536
1880-81 ..	38,980	336	39,316	2,118	4,382	7,062	2,102	1,504	6,057	23,225
1881-82 ..	40,033	732	40,766	2,120	4,513	6,876	2,093	1,468	6,676	23,746

NOTE.—These figures are taken from Appendices A and B to the Annual Review of District Fund operations.

Table No. XXXVII, showing GOVERNMENT and AIDED SCHOOLS.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21
	HIGH SCHOOLS.						MIDDLE SCHOOLS.						PRIMARY SCHOOLS.							
	ENGLISH.				VERNACULAR.		ENGLISH.				VERNACULAR.		ENGLISH.				VERNACULAR.			
YEAR.	Government.		Aided.		Government.		Government.		Aided.		Government.		Government.		Aided.		Government.		Aided.	
	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.
FIGURES FOR BOYS.																				
1877-78 ..	1	[illegible]	..	..	..	..	1	121	..	..	5	791	..	..	..	..	23	1,081	2	130
1878-79 ..	1	16	..	..	..	..	1	112	..	..	4	683	..	..	..	..	24	1,026	3	123
1879-80 ..	1	[illegible]	..	..	..	..	3	159	..	..	2	35	3	553	..	..	26	1,222	..	..
1880-81 ..	1	18	..	..	..	..	3	167	..	..	2	44	3	521	..	..	26	1,208	..	..
1881-82 ..	1	24	..	..	..	..	3	127	..	..	2	40	3	586	..	..	26	1,244	..	..
FIGURES FOR GIRLS.																				
1877-78 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	297	..	..
1878-79 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	272	..	..
1879-80 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	284	..	..
1880-81 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	285	..	..
1881-82 ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	8	263	..	..

N. B.—Since 1879-80, in the case of both Government and Aided Schools, those scholars only who have completed the Middle School course are shown in the returns as attending High Schools, and those only who have completed the Primary School course are shown as attending Middle Schools. Previous to that year, boys attending the Upper Primary Department were included in the returns of Middle Schools in the case of Institutions under the immediate control of the Education Department, whilst in Institutions under District Officers, boys attending both the Upper and Lower Primary Departments were included in Middle Schools. In the case of Aided Institutions, a High School included the Middle and Primary Departments attached to it; and a Middle School, the Primary Department. Before 1879-80, Branches of Government Schools, if supported on the grant-in-aid system, were classed as Aided Schools; in the returns for 1879-80 and subsequent years they have been shown as Government Schools. Branches of English Schools, whether Government or Aided, that were formerly included amongst Vernacular Schools, are now returned as English Schools. Hence the returns before 1879-80 do not afford the means of making a satisfactory comparison with the statistics of subsequent years.

Indigenous Schools and Jail Schools are not included in these returns.

Table No. XXXVIII, showing the working of DISPENSARIES.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Name of Dispensary.	Class of Dispensary.	NUMBER OF PATIENTS TREATED.														
		Men.					*Women.*					*Children.*				
		1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.
Jhang ..	C. H.	..	8,146	7,103	9,844	9,562	..	1,801	2,581	2,567	2,631	..	2,005	1,888	2,040	2,468
Do. branch	3rd	..	4,679	4,001	6,120	6,012	..	1,609	1,365	1,761	2,022	..	1,752	1,455	1,589	1,875
Shorkot ..	2nd	..	5,162	4,782	5,696	6,515	..	1,921	2,541	1,887	2,287	..	1,243	1,781	1,666	1,523
Chiniot ..	1st	..	6,367	5,109	6,122	6,870	..	3,662	2,760	2,589	2,906	..	2,212	1,949	1,928	1,987
Ahmadpur ..	2nd	..	6,224	3,616	4,896	5,116	..	3,080	1,307	1,401	2,220	..	2,785	2,461	1,689	1,833
Kot Isa Shah	2nd	..	3,496	3,908	5,279	5,152	..	2,781	3,153	3,417	3,702	..	2,797	2,691	2,784	2,554
Total ..	..	..	34,074	28,519	37,957	39,827	..	14,854	13,657	13,622	15,768	..	12,744	12,225	11,696	12,240

		18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Name of Dispensary.	Class of Dispensary.	*Total Patients.*					*In-door Patients.*					*Expenditure in Rupees.*				
		1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.
Jhang ..	C. H.	..	11,952	11,522	14,451	14,661	..	562	341	498	478	..	3,209	3,781	3,214	2,452
Do. branch..	3rd	..	8,040	6,821	9,470	10,509	..	..	..	..	..	..	1,032	1,243	794	599
Shorkot ..	2nd	..	8,326	9,104	9,249	10,325	..	..	..	144	287	..	1,134	1,242	1,354	1,345
Chiniot ..	1st	..	12,241	9,818	10,630	11,763	..	353	194	214	231	..	2,246	2,248	2,371	2,650
Ahmadpur ..	2nd	..	12,039	7,384	7,986	9,169	..	..	..	36	198	..	761	749	1,071	1,196
Kot Isa Shah..	2nd	..	9,074	9,752	11,480	11,408	..	..	..	96	165	..	684	625	805	774
Total ..	..	..	61,672	54,401	63,275	67,835	..	915	535	988	1,359	..	9,155	9,888	9,608	9,016

NOTE.—These figures are taken from Tables Nos. II, IV, and V of the Dispensary Report.

Table No. XXXIX, showing CIVIL and REVENUE LITIGATION.

1	2	3	4	5	6	7	8	9
YEAR.	*Number of Civil Suits concerning*				*Value in rupees of Suits concerning* *			Number of Revenue cases.
	Money or movable property.	Rent and tenancy rights.	Land and revenue, and other matters.	Total.	Land.	Other matters.	Total.	
1878 ..	4,701	168	752	5,711	..	1,80,490	1,80,490	5,042
1879 ..	4,783	206	835	5,824	14,747	1,70,276	1,85,023	5,955
1880 ..	5,212	84	1,175	6,471	45,724	1,71,380	2,17,104	8,135
1881 ..	4,148	20	331	5,499	35,972	1,66,919	2,02,891	6,849
1882 ..	4,530	20	290	4,840	31,309	1,74,338	2,05,647	6,578

NOTE.—These figures are taken from Tables Nos. VI and VII of the Civil Report from 1878 to 1880, and Nos. II and III of the Reports on Civil Justice for 1881 and 1882.

* Suits heard in Settlement courts are excluded from these columns, no details of the value of the property being available.

Table No. XL, showing CRIMINAL TRIALS.

1		2	3	4	5	6
DETAILS.		1878.	1879.	1880.	1881.	1882.
Persons tried.	Brought to trial	1,970	2,159	1,915	2,417	2,543
	Discharged	616	917	792	898	845
	Acquitted	401	340	225	118	114
	Convicted	859	942	893	1,343	1,493
	Committed or referred	4	4	18	14	35
Cases disposed of.	Summons cases (regular)	..	..	..	522	477
	" (summary)	..	..	..	..	..
	Warrant cases (regular)	..	..	..	670	658
	" (summary)	..	..	..	5	2
	Total cases disposed of	887	1,089	965	1,197	1,137
Number of persons sentenced to	Death	1	1	2	1	3
	Transportation for life	..	1	3	..	1
	" for a term	..	..	..	..	3
	Penal servitude	..	..	..	..	..
	Fine under Rs. 10	528	487	525	421	723
	" 10 to 50 rupees	182	195	187	387	319
	" 50 to 100 "	5	5	15	88	18
	" 100 to 500 "	5	4	2	46	1
	" 500 to 1,000 "	..	..	..	..	..
	Over 1,000 rupees	..	..	..	..	..
	Imprisonment under 6 months	327	436	401	557	460
	" 6 months to 2 years	99	102	115	93	154
	" over 2 years	9	8	14	7	4
	Whipping	62	94	93	53	62
	Find sureties of the peace	6	9	13	..	..
	Recognizance to keep the peace	..	..	..	4	27
	Give sureties for good behaviour	2	35	23	248	226

NOTE.—These figures are taken from Statements Nos. III and IV of the Criminal Reports for 1878 to 1880, and Nos. IV and V of the Criminal Reports for 1881 and 1882.

Table No. XLI, showing POLICE INQUIRIES.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Nature of offence.	Number of cases inquired into.					Number of persons arrested or summoned.					Number of persons convicted.				
	1877	1878	1879	1880	1881	1877	1878	1879	1880	1881	1877	1878	1879	1880	1881
Rioting or unlawful assembly	5	4	1	1	18	38	27	23	19	158	36	12	18	17	114
Murder and attempts to murder	2	6	3	7	1	6	12	4	9	8	1	5	2	3	3
Total serious offences against the person	23	27	30	47	38	47	58	66	102	60	28	15	37	28	35
Abduction of married women	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total serious offences against property	158	242	246	229	162	106	160	232	180	164	78	111	144	122	116
Total minor offences against the person	9	8	7	21	37	18	24	13	34	60	8	22	11	18	42
Cattle theft	200	324	309	356	268	180	257	293	294	256	146	172	200	217	191
Total minor offences against property	419	626	670	645	626	420	518	606	623	653	310	337	400	420	445
Total cognizable offences	617	914	960	947	887	426	810	1,036	964	1,103	461	503	674	608	760
Rioting, unlawful assembly, affray	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Offences relating to marriage	12	1	3	2	20	9	1	7	2	28	2	1	1	1	10
Total non-cognizable offences	61	40	37	42	104	83	89	51	57	130	32	29	30	30	76
GRAND TOTAL of offences	1,506	2,192	2,263	2,297	2,161	1,327	1,936	2,421	2,284	2,615	1,102	1,207	1,577	1,466	1,792

NOTE.—These figures are taken from Statement A of the Police Report.

Table No. XLII, showing CONVICTS in GAOL.

1	2	3	4	5	6	7	8	9	10	11	12	13	14
	No. in gaol at beginning of the year.		*No imprisoned during the year.*		*Religion of convicts.*			*Previous occupation of male convicts.*					
YEAR.	Males.	Females.	Males.	Females.	Musalman.	Hindu.	Buddhist and Jain.	Official.	Professional.	Service.	Agricultural.	Commercial.	Industrial.
1877-78	201	4	446	5	588	37	..	4	..	..	500	..	..
1878-79	156	3	424	11	540	25	..	2	..	1	454	..	..
1879-80	225	5	544	7	228	7	..	2	1	..	204	7	..
1880-81	245	3	513	13	255	11	..	2	4	..	200	3	..
1881-82 .. .	292	4	676	17	206	13	..	1	5	..	128	3	.

	15	16	17	18	19	20	21	22	23	24	25	26
	Length of sentence of convicts.							*Previously convicted.*			*Pecuniary results.*	
YEAR.	Under 6 months.	6 months to 1 year.	1 year to 2 years.	2 years to 5 years.	5 years to 10 years.	Over 10 years and transportation.	Death.	Once.	Twice.	More than twice.	Cost of maintenance.	Profits of convict labour.
1877-78	405	122	111	16	1	1	..	73	12	3	13,036	3,286
1878-79 . ..	404	80	97	10	1	..	2	43	11	6	14,874	2,504
1879-80	141	52	36	16	2	1	..	19	10	1	17,964	934
1880-81	159	68	51	15	3	..	..	22	14	3	16,245	3,583
1881-82 ..	141	47	34	15	1	..	..	38	10	5	17,459	1,757

NOTE.—These figures are taken from Tables Nos. XXVIII, XXIX, XXX, XXXI, and XXXVII of the Administration Report.

Table No. XLIII, showing the POPULATION of TOWNS.

1	2	3	4	5	6	7	8	9	10
Tahsil.	Town.	Total population.	Hindus.	Sikhs.	Jains.	Musalmans.	Other religions.	No. of occupied houses.	Persons per 100 occupied houses.
Jhang ..	Maghiana ..	12,574	5,917	352	..	6,305	..	1,684	747
	Jhang ..	9,655	4,270	143	..	4,636	..	1,026	862
Chiniot ..	Chiniot ..	10,731	3,475	113	..	7,143	..	1,088	986
Shorkot ..	Shorkot ..	2,283	1,167	12	..	1,104	..	365	625
	Ahmadpur ..	2,338	1,433	29	..	876	..	432	541

NOTE.—These figures are taken from Table No. XX of the Census Report of 1881.

Table No. XLIV, showing BIRTHS and DEATHS for TOWNS.

1	2	3	4	5	6	7	8	9	10	11	12	13
TOWN.	Sex.	Total population by the Census of 1875.	Total births registered during the year.					Total deaths registered during the year.				
			1877.	1878.	1879.	1880.	1881.	1877.	1878.	1879.	1880.	1881.
Maghiana	Males	7,719	212	211	198	279	253	188	275	209	129	158
	Females	5,899	196	205	155	238	239	137	237	165	152	145
Jhang	Males	4,634	98	124	100	163	169	99	97	169	96	86
	Females	3,975	103	106	84	142	177	96	90	131	85	110
Chiniot	Males	6,259	227	227	189	190	231	146	168	154	142	135
	Females	5,740	245	229	196	217	219	164	182	172	157	151

NOTE—These figures are taken from Table No. LVII of the Administration Report.

Table No. XLV, showing MUNICIPAL INCOME.

1	2	3	4	5
NAME OF MUNICIPALITY.	Jhang and Maghiana.	Chiniot.	Shorkot.	Ahmadpur.
Class of Municipality	II.	III.	III.	III.
1870-71	10,896	2,749	..	..
1871-72	21,065	4,140	..	..
1872-73	22,182	4,811	..	..
1873-74	20,879	5,020	..	..
1874-75	26,353	5,774	1,084	995
1875-76	24,821	8,859	1,108	762
1876-77	23,590	5,539	1,513	880
1877-78	23,911	5,524	1,293	788
1878-79	23,981	5,546	1,264	1,049
1879-80	28,146	6,132	1,587	1,015
1880-81	25,005	6,720	1,212	1,032
1881-82	26,594	6,586	1,335	1,000

Table No. XLVI, showing DISTANCES.

	Jhang.	Bhoána.	Chiniot.	Lálián	Trimmu.	Cháh Bhareri.	Bhamb.	Kot Isá Sháh.	Toba Tek Singh.	Haveli Bahádar Sháh.	Shorkot.	Ahmadpur.
Jhang												
Bhoána	28											
Chiniot .. .	52	24										
Lálián	54	28	14									
Trimmu . ..	12	40	64	66								
Cháh Bhareri ..	30	58	82	86	18							
Bhamb	20	24	48	41	28	46						
Kot Isá Sháh	29	33	57	50	37	55	9					
Toba Tek Singh	23	51	75	79	24	42	43	52				
Haveli Bahadár Sháh	17	45	69	83	9	27	37	46	18			
Shorkot	34	62	86	88	26	44	54	61	26	17		
Ahmadpur ...	56	84	108	112	44	44	72	81	48	39	22	